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L7 ANSWER 32 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1998:352627 CAPLUS
 DN 129:54476
 TI Protein kinase inhibitors for treatment of neurological disorders
 IN Lewis, Michael E.; Kauer, James C.; Neff, Nicola; Roberts-Lewis, Jill;
 Murakata, Chikara; Saito, Hiromitsu; Matsuda, Yuzuru; Glicksman, Marcie
 A.; Kanai, Fumihiko; Kaneko, Masami
 PA Cephalon, Inc., USA; Kyowa Hakko Kogyo Co., Ltd.
 SO U.S., 61 pp., Cont.-in-part of U.S. Ser. No. 329,540.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | US 5756494 | A | 19980526 | US 1995-456642 | 19950602 |
| | US 5461146 | A | 19951024 | US 1993-96561 | 19930722 |
| | EP 768312 | A2 | 19970416 | EP 1996-116661 | 19930726 |
| | EP 768312 | A3 | 19970604 | | |
| | EP 768312 | B1 | 20000906 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| | EP 1002534 | A1 | 20000524 | EP 1999-120008 | 19930726 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE | | | | |
| | JP 2003113184 | A2 | 20030418 | JP 2002-244111 | 19930726 |
| | US 5621100 | A | 19970415 | US 1994-329540 | 19941026 |
| | CA 2203767 | AA | 19960509 | CA 1995-2203767 | 19951004 |
| | WO 9613506 | A1 | 19960509 | WO 1995-US12965 | 19951004 |
| | W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT | | | | |
| | RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | AU 9539516 | A1 | 19960523 | AU 1995-39516 | 19951004 |
| | AU 704314 | B2 | 19990422 | | |
| | EP 788501 | A1 | 19970813 | EP 1995-937391 | 19951004 |
| | EP 788501 | B1 | 20020605 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, | | | | |
| SE | BR 9509480 | A | 19970930 | BR 1995-9480 | 19951004 |
| | JP 10510514 | T2 | 19981013 | JP 1995-514605 | 19951004 |
| | EP 1125938 | A1 | 20010822 | EP 2001-110483 | 19951004 |
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| | NZ 295871 | A | 20010928 | NZ 1995-295871 | 19951004 |
| | AT 218571 | E | 20020615 | AT 1995-937391 | 19951004 |
| | ES 2177665 | T3 | 20021216 | ES 1995-937391 | 19951004 |
| | US 5741808 | A | 19980421 | US 1997-800383 | 19970214 |
| PRAI | US 1992-920102 | B2 | 19920724 | | |
| | US 1993-96561 | A2 | 19930722 | | |
| | US 1994-329540 | A2 | 19941026 | | |
| | EP 1993-917337 | A3 | 19930726 | | |
| | EP 1996-116661 | A3 | 19930726 | | |
| | JP 1994-504731 | A3 | 19930726 | | |
| | US 1995-456642 | A | 19950602 | | |
| | EP 1995-937391 | A3 | 19951004 | | |

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Derivs. of K-252a I (R = HO, MeO; R1 = H, Br, NHCONHPh, CH2SPh, 2-pyrimidinylthiomethyl, 2-furylmethylthiomethyl, etc.; R2 = H, Br, Cl, CH2OH, etc.; R3 = CH2OH, CO2Me, CH2NHCO2Ph, CONHPh, CH2NHCO2Me, etc.; Z

=

O, H2), as well as novel bis-N-substituted derivs. of staurosporine XNMeWNMeX (W = C(:Y)NH, W1NHC(:Y); W1 = hydrocarbylene radical of 2-20 carbon atoms; Y = O, S) were prepd. The invention also features a

method

for treating diseased neuronal cells involving the administration of either the novel staurosporine derivs. or specified functional derivs.

of

K-252a. Thus, staurosporine was treated with hexamethyl-bis-isocyanate

to

give 1,6-hexamethylene-bis-(carbamylstaurosporine). The spinal cord choline acetyltransferase (CHAT) activity of I (R = OH, R1 = R2 = Br; R3

=

CH2OH, Z = H2) at 300 nM was 146 compared with K-252a of 100.

IT

118735-80-1P 121664-89-9P 121664-90-2P

121665-11-0P 156177-61-6P 156177-65-0P

156177-66-1P 156177-73-0P 156177-75-2P

156177-79-6P 167371-04-2P 167371-05-3P

167371-06-4P 167371-07-5P 167371-08-6P

167371-09-7P 167371-10-0P 167371-11-1P

167371-12-2P 167371-13-3P 167371-14-4P

167371-15-5P 167371-16-6P 167371-17-7P

167371-18-8P 178404-41-6P 178404-44-9P

178404-45-0P 178404-47-2P 178404-52-9P

178404-53-0P 178404-54-1P 178404-55-2P

178404-56-3P 178404-63-2P 178404-64-3P

178404-65-4P 178404-66-5P

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic

use);

BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of staurosporine and K-252a derivs. as protein kinase inhibitors for treatment of neurol. disorders)

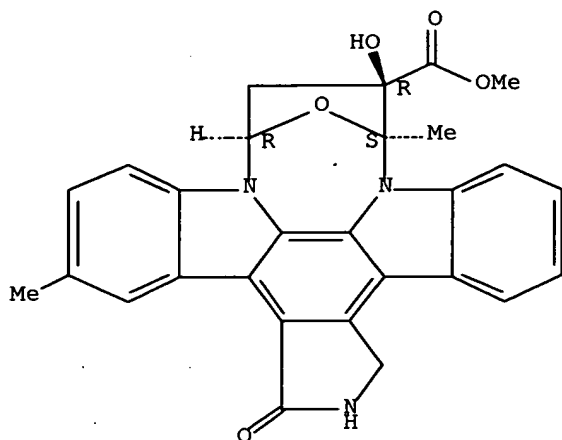
RN 118735-80-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9,16-dimethyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA

INDEX

NAME)

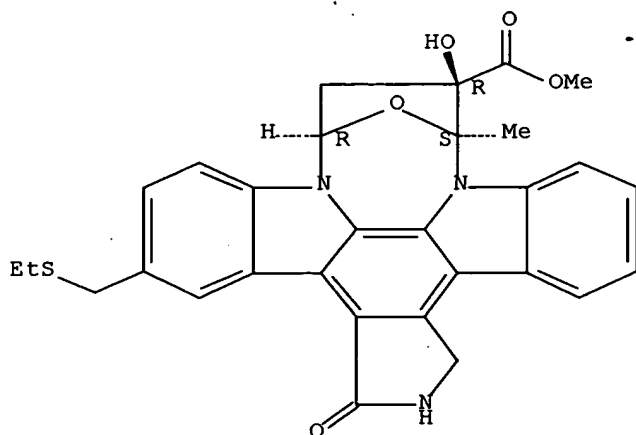
Absolute stereochemistry.



RN 121664-89-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

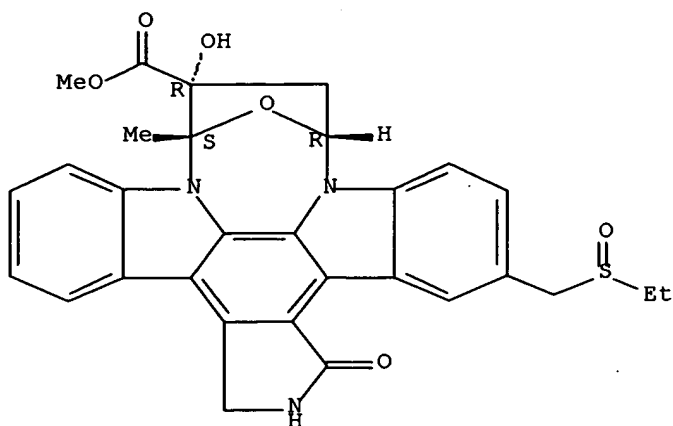
Absolute stereochemistry.



RN 121664-90-2 CAPLUS

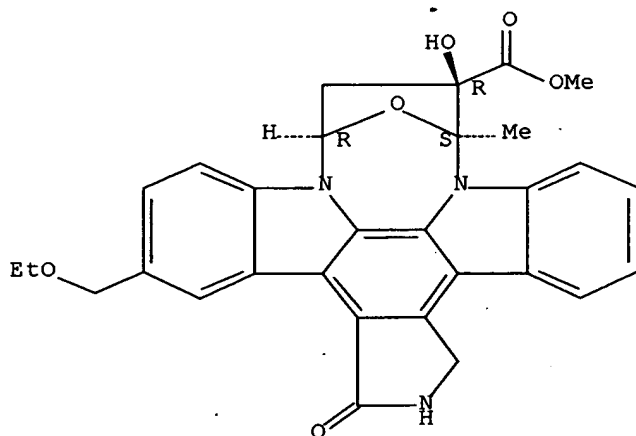
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfinyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



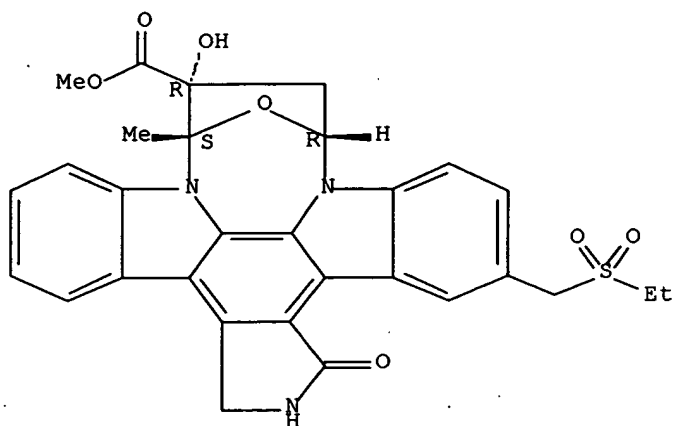
RN 121665-11-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.



RN 156177-61-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfonyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

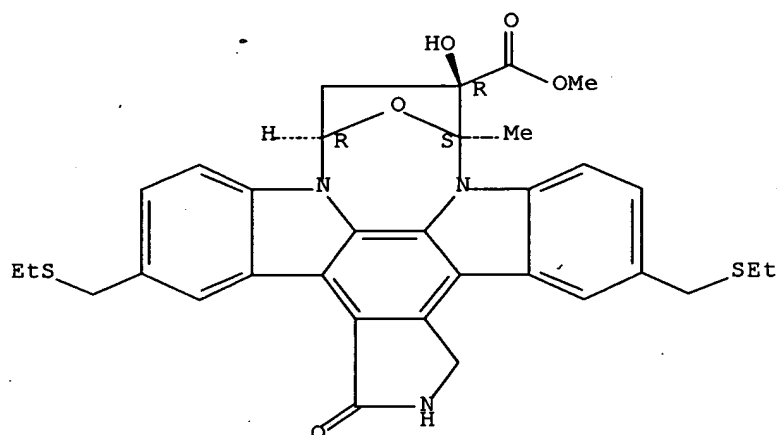
Absolute stereochemistry.



RN 156177-65-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

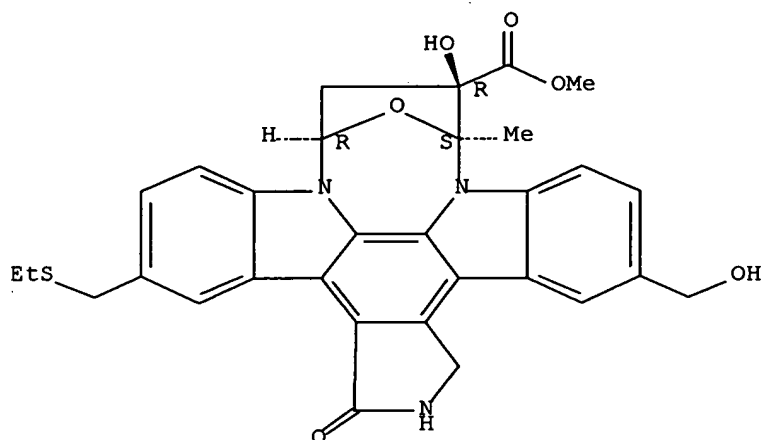
Absolute stereochemistry.



RN 156177-66-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

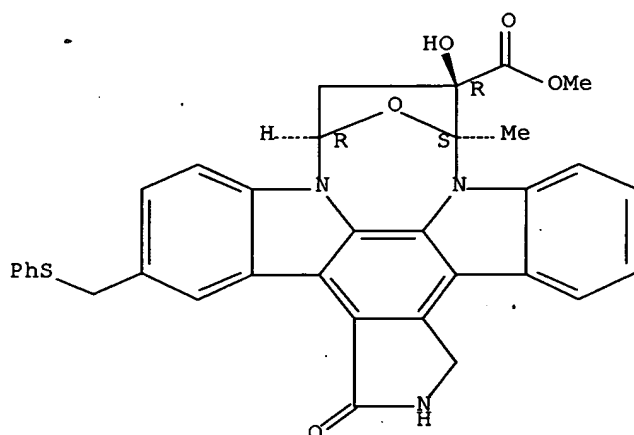
Absolute stereochemistry.



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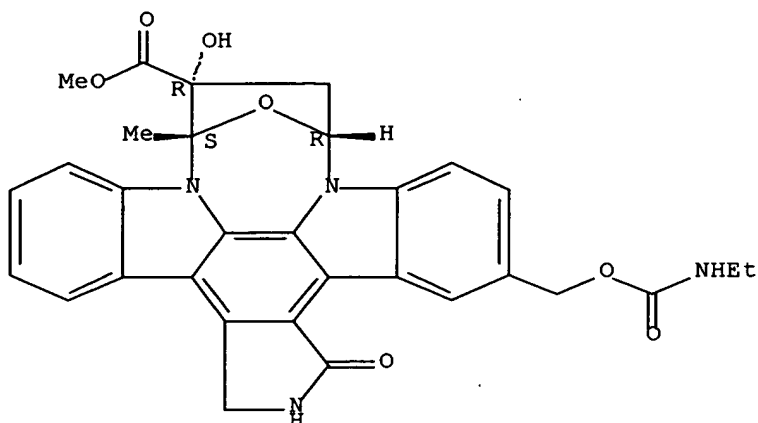
Absolute stereochemistry.



RN 156177-75-2 CAPLUS

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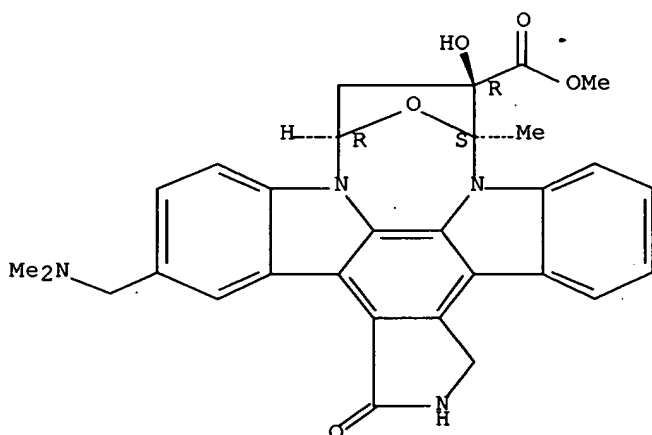
Absolute stereochemistry.



RN 156177-79-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(dimethylamino)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

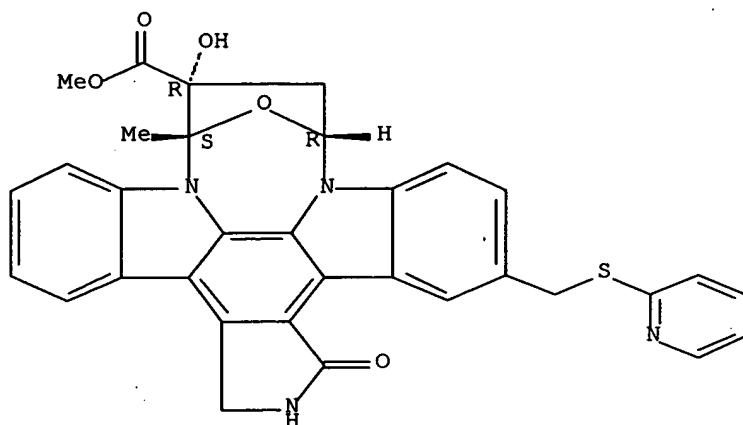
Absolute stereochemistry.



RN 167371-04-2 CAPLUS

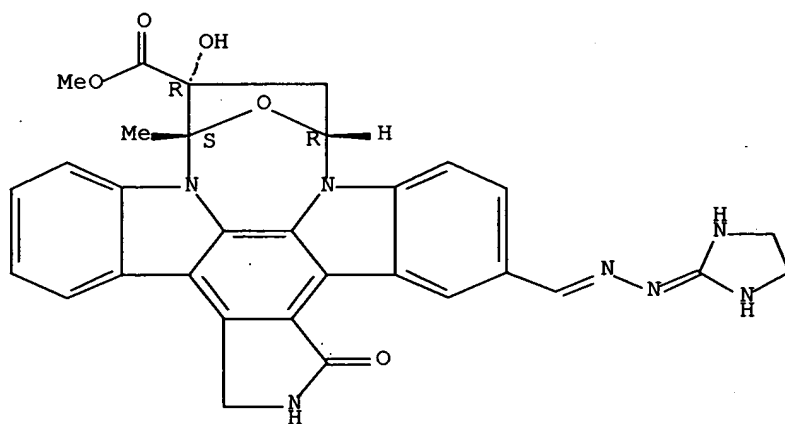
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyridinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



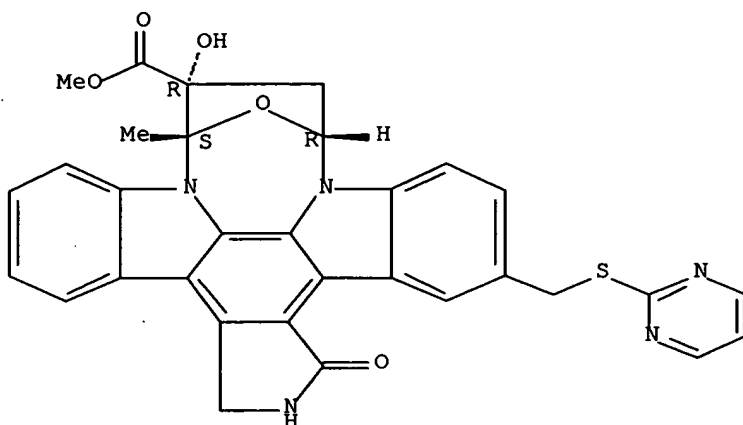
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 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[4,5-dihydro-1H-imidazol-2-yl)hydrazono]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.



RN 167371-06-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyrimidinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

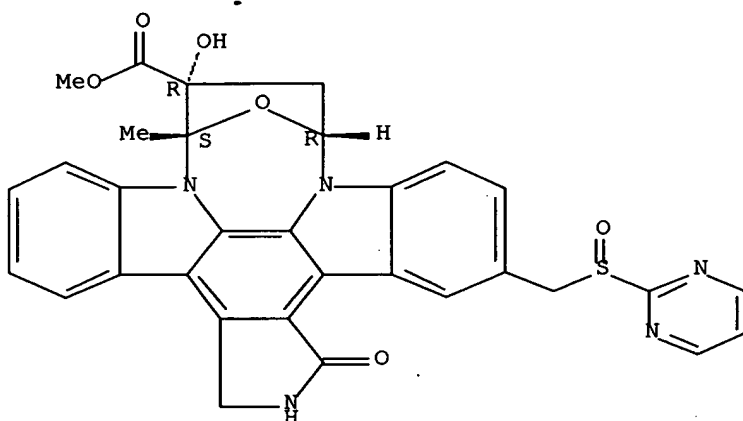
Absolute stereochemistry.



RN 167371-07-5 CAPLUS

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(9S,10R,12R)- (9CI) (CA INDEX NAME)

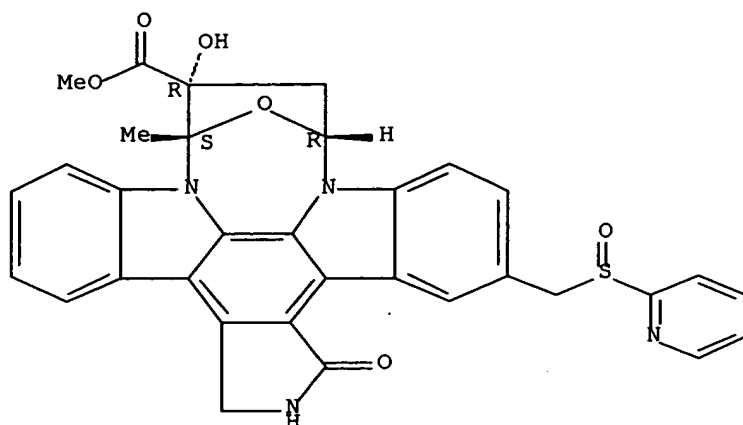
Absolute stereochemistry.



RN 167371-08-6 CAPLUS

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(9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

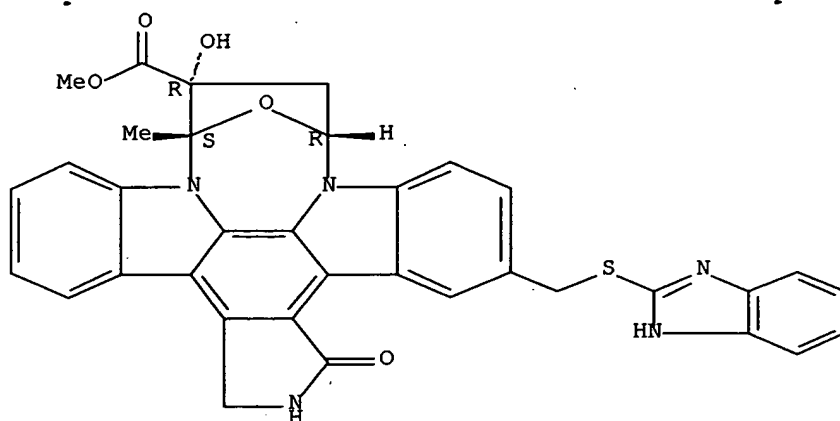


RN 167371-09-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(1H-benzimidazol-2-ylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl

ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

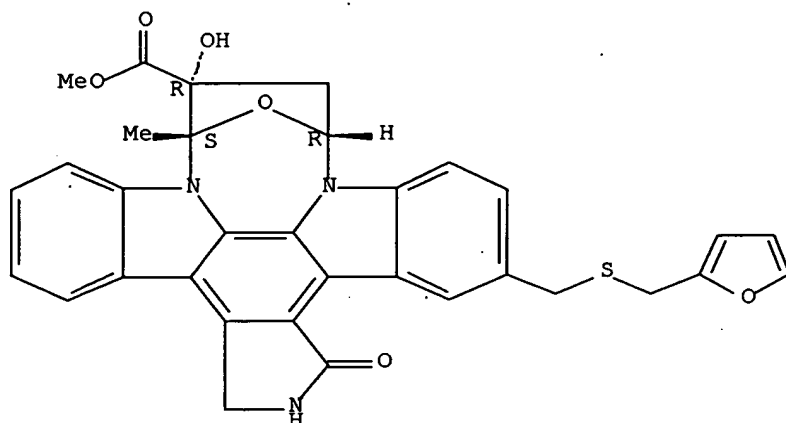
Absolute stereochemistry.



RN 167371-10-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(2-furanylmethyl)thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

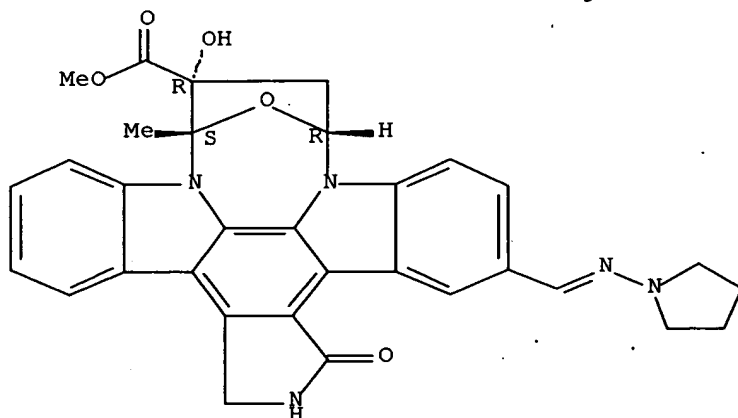


RN 167371-11-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1-pyrrolidinylimino)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

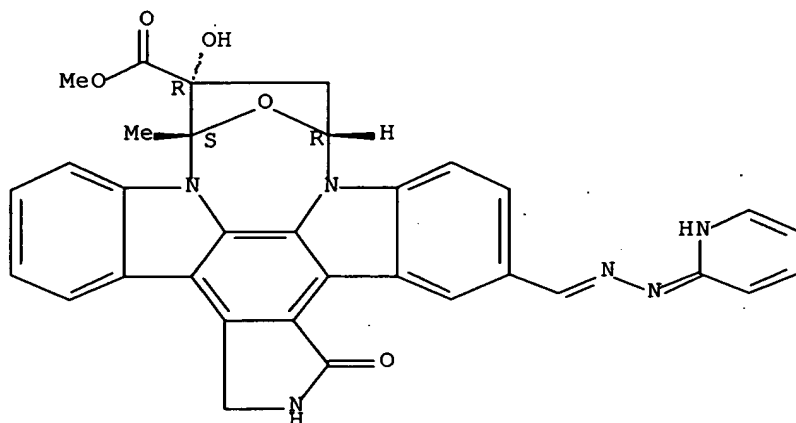


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Absolute stereochemistry.

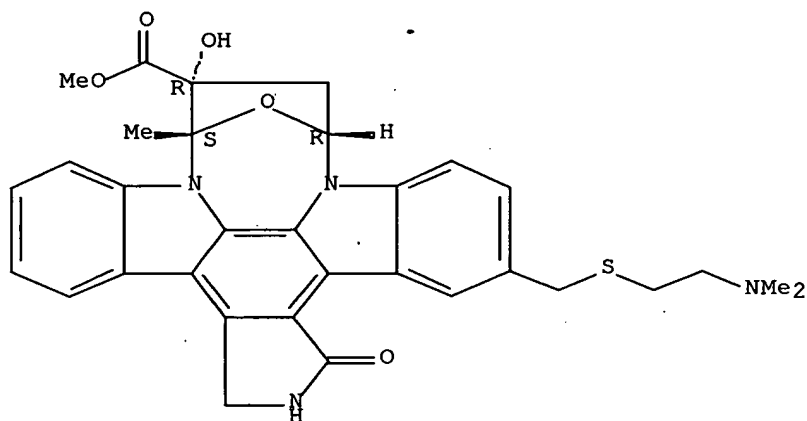
Double bond geometry unknown.



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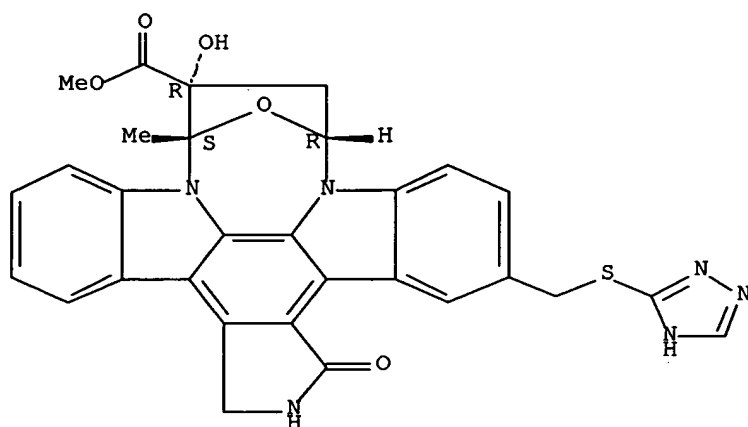
Absolute stereochemistry.



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Absolute stereochemistry.

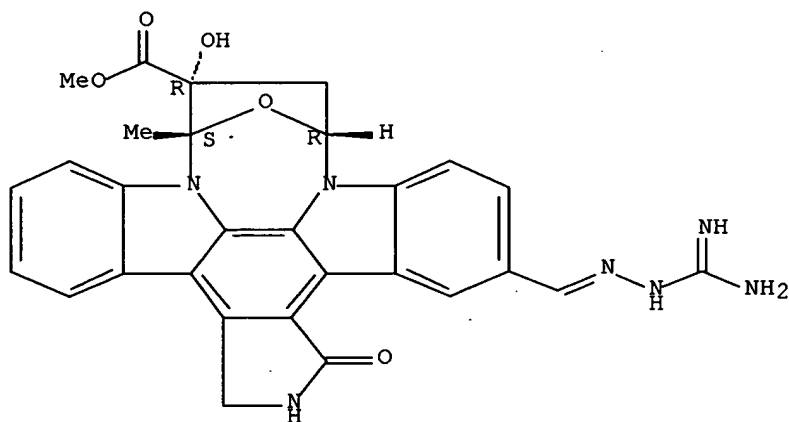


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Absolute stereochemistry.

Double bond geometry unknown.

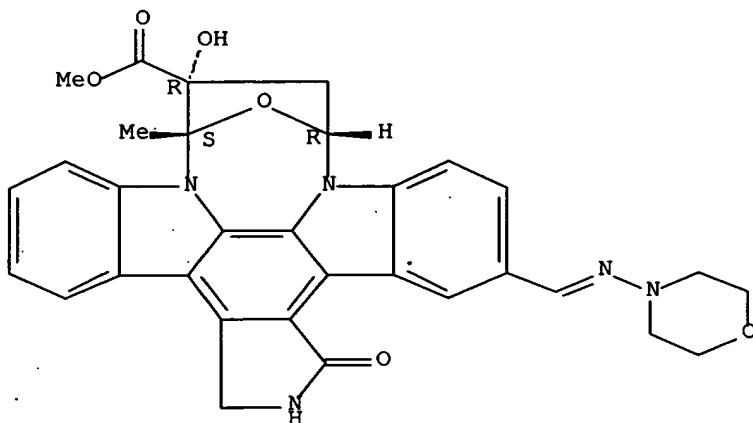


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Absolute stereochemistry.

Double bond geometry unknown.

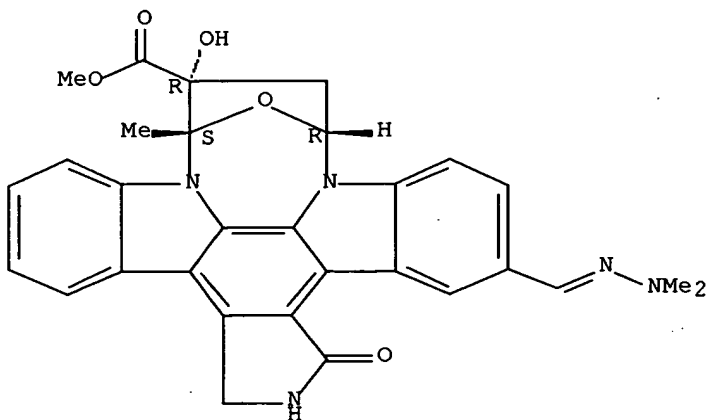


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2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
(9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

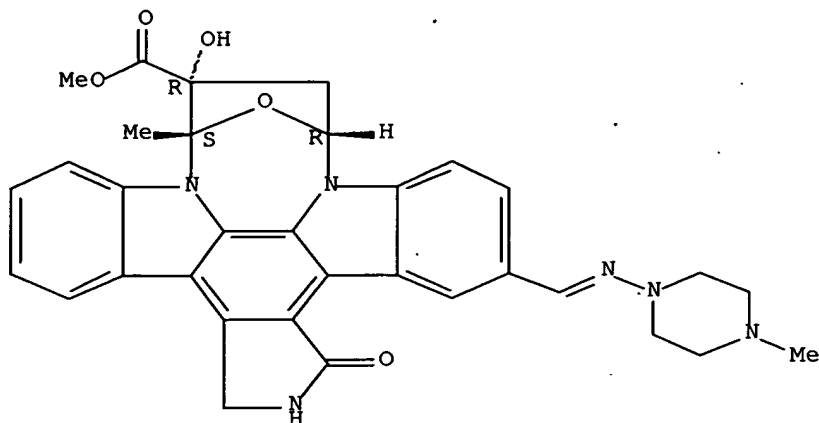


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ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

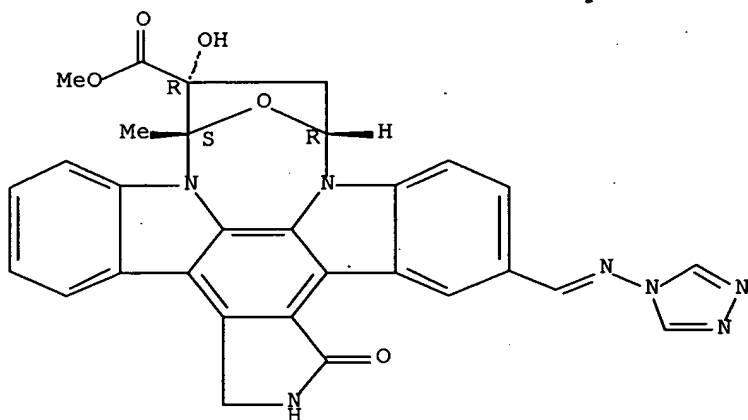


RN 178404-41-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(4H-1,2,4-triazol-4-ylimino)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

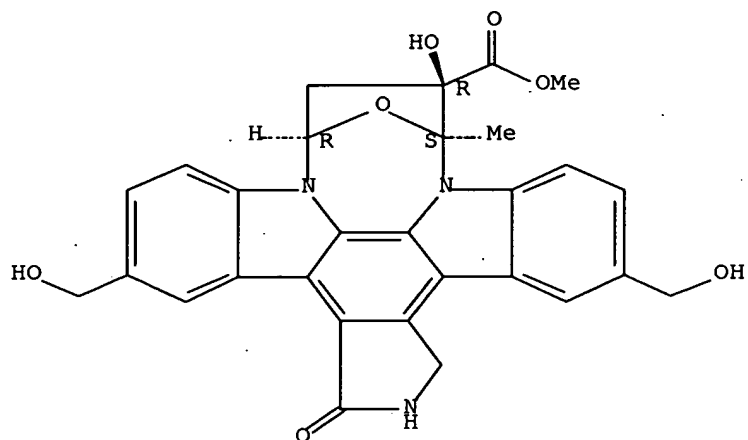
Double bond geometry unknown.



RN 178404-44-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

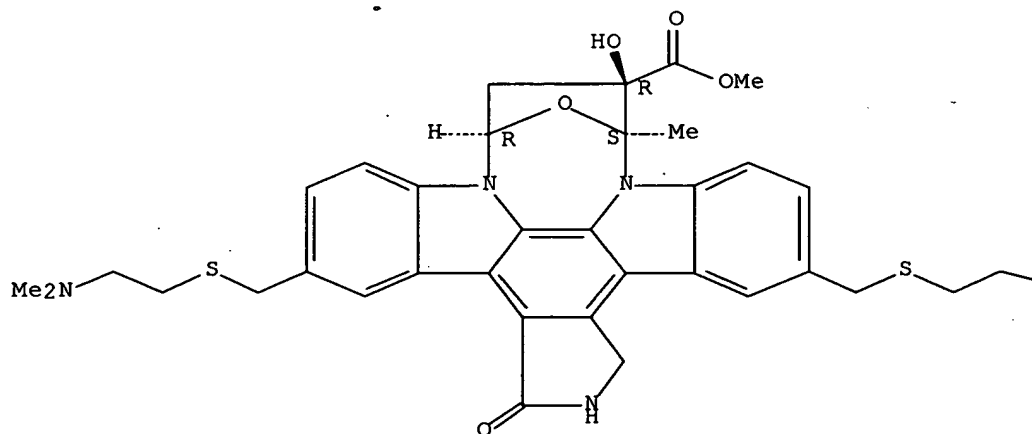


RN 178404-45-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

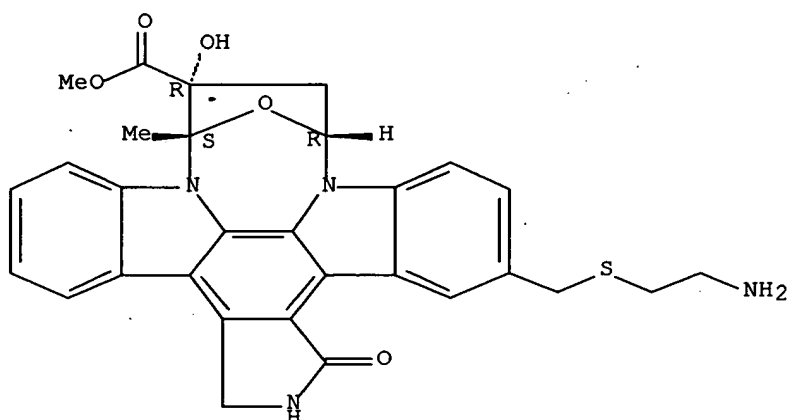
PAGE 1-A



—NMe₂

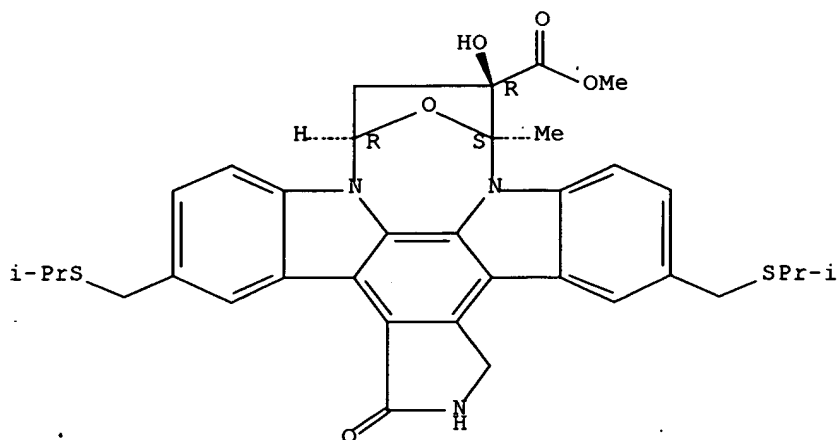
RN 178404-47-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[2-aminoethyl)thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 178404-52-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[[1-methylethyl)thio]methyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

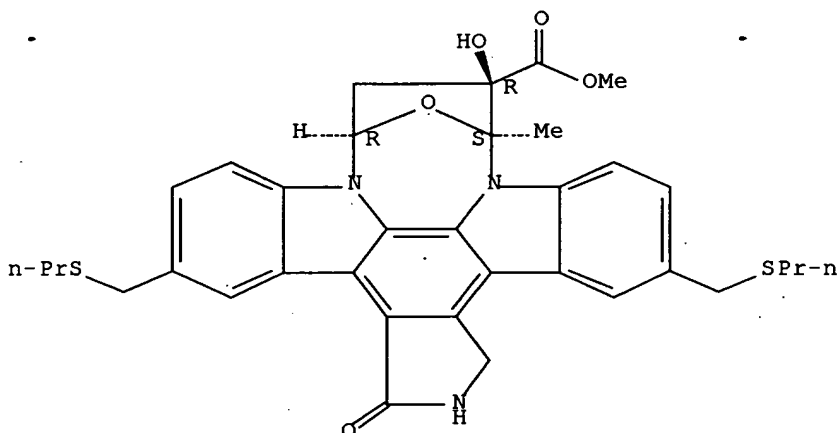
Absolute stereochemistry.



RN 178404-53-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(propylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

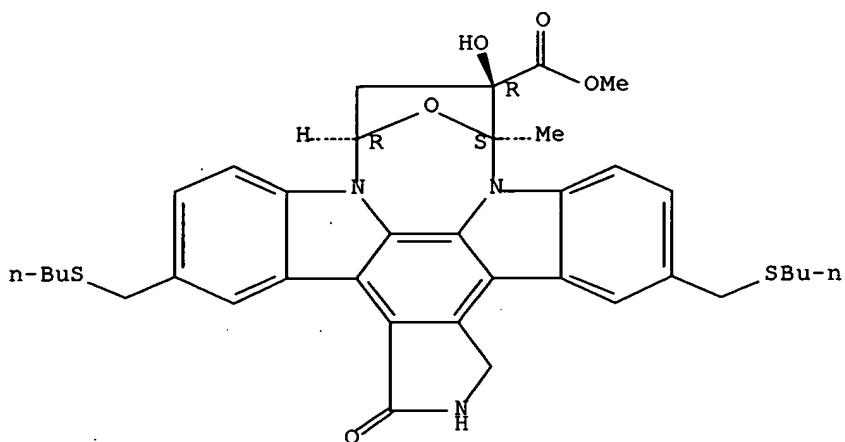
Absolute stereochemistry.



RN 178404-54-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(butylthio)methyl]-, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

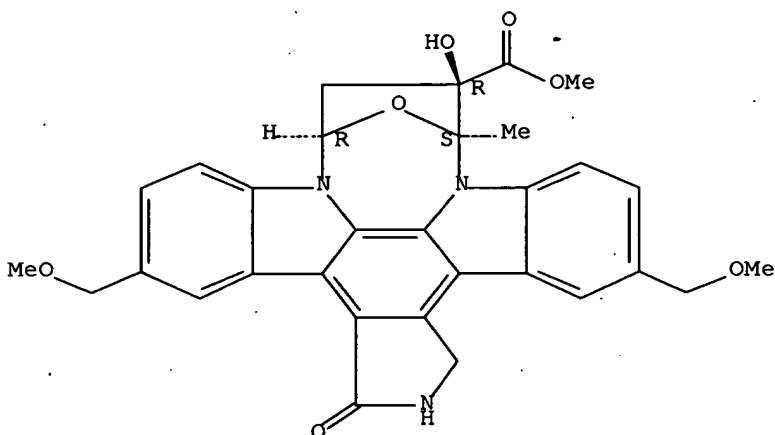
Absolute stereochemistry.



RN 178404-55-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(methoxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

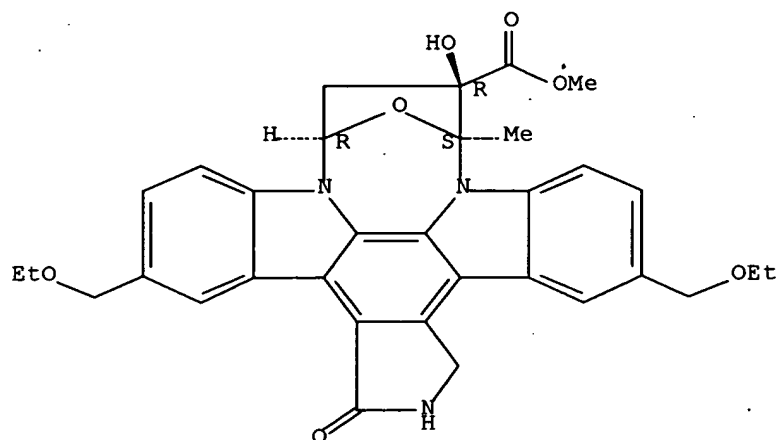
Absolute stereochemistry.



RN 178404-56-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

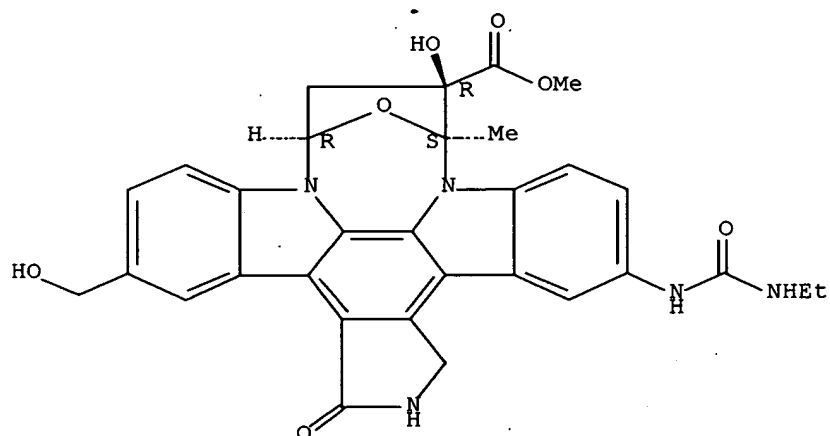
Absolute stereochemistry.



RN 178404-63-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[(ethylamino)carbonyl]amino-2,3,9,10,11,12-hexahydro-10-hydroxy-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

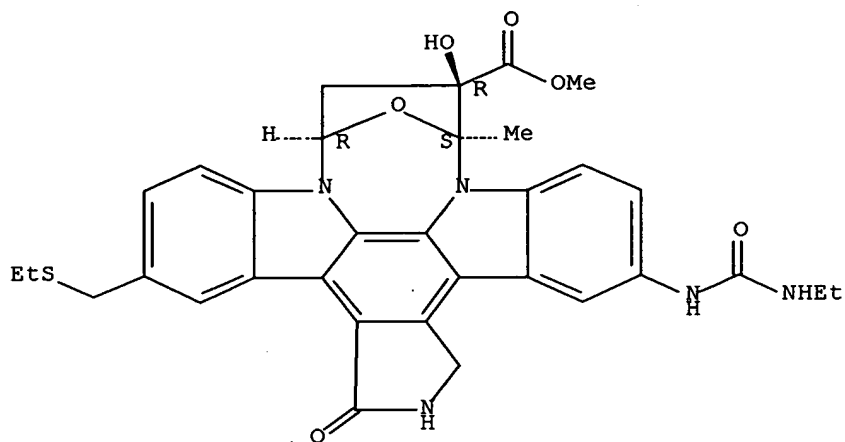
Absolute stereochemistry.



RN 178404-64-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[(ethylamino)carbonyl]amino-16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

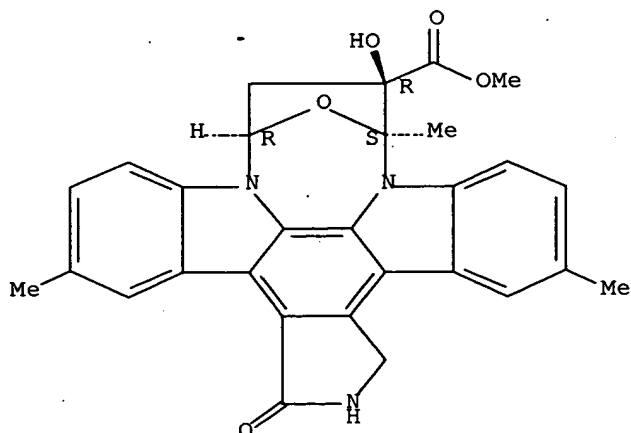
Absolute stereochemistry.



RN 178404-65-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,9,16-trimethyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

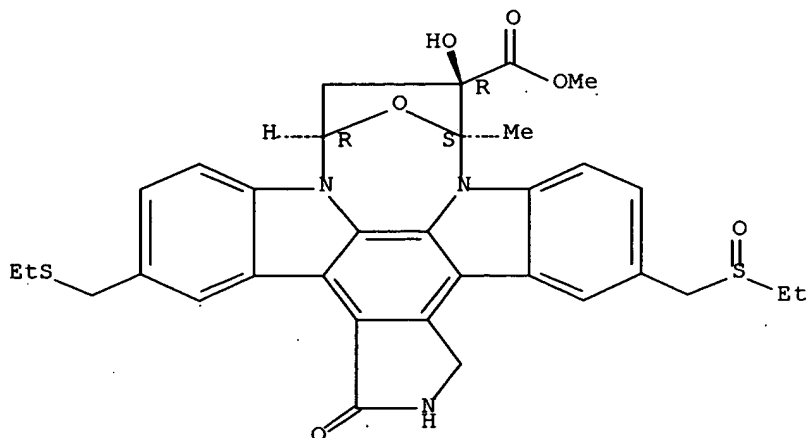
Absolute stereochemistry.



RN 178404-66-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[(ethylsulfinyl)methyl]-16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 118777-59-6 118777-60-9 121664-78-6

208651-59-6 208651-60-9

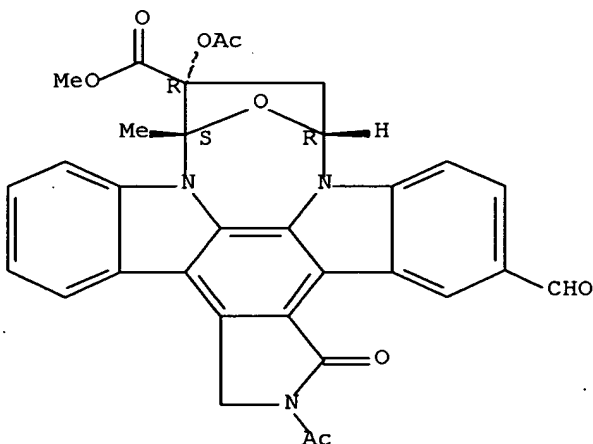
RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of staurosporine and K-252a derivs. as protein kinase inhibitors for treatment of neurol. disorders)

RN 118777-59-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

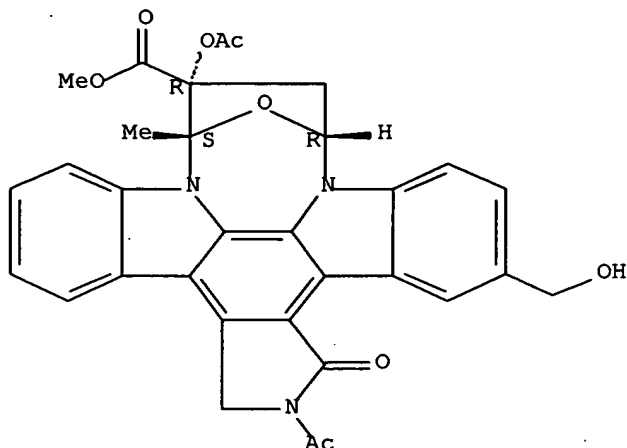
Absolute stereochemistry.



RN 118777-60-9 CAPLUS

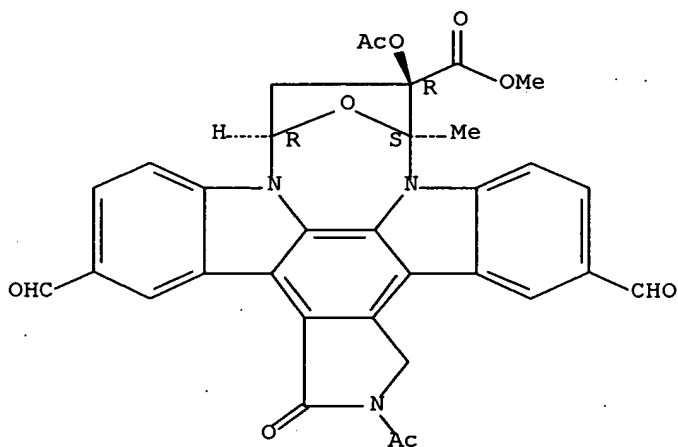
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



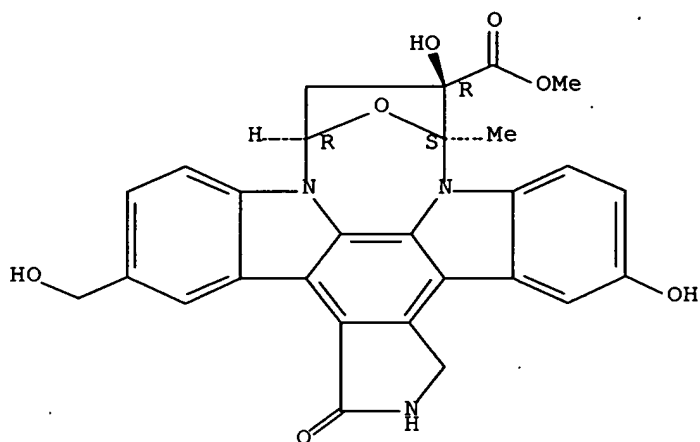
RN 121664-78-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-diformyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 208651-59-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-5,10-dihydroxy-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

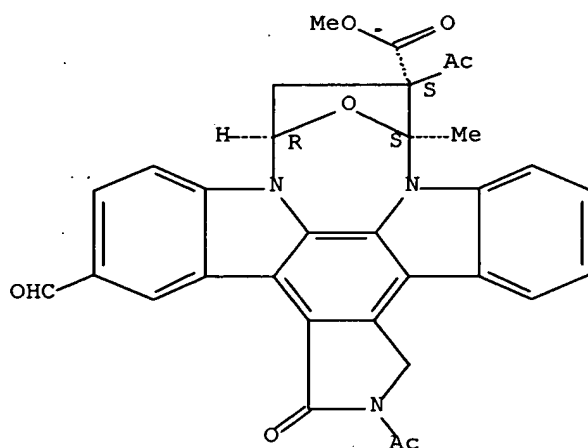
Absolute stereochemistry.



RN 208651-60-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,9-diacetyl-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10S,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 156177-91-2P 156177-93-4P 167370-76-5P
 167370-77-6P 167370-78-7P 167370-79-8P
 167370-80-1P 167370-81-2P 167370-82-3P
 167370-83-4P 167370-84-5P 167370-85-6P
 173829-96-4P 178404-40-5P 178404-42-7P
 178404-46-1P 178404-57-4P 178404-61-0P
 178404-62-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

(Reactant or reagent)

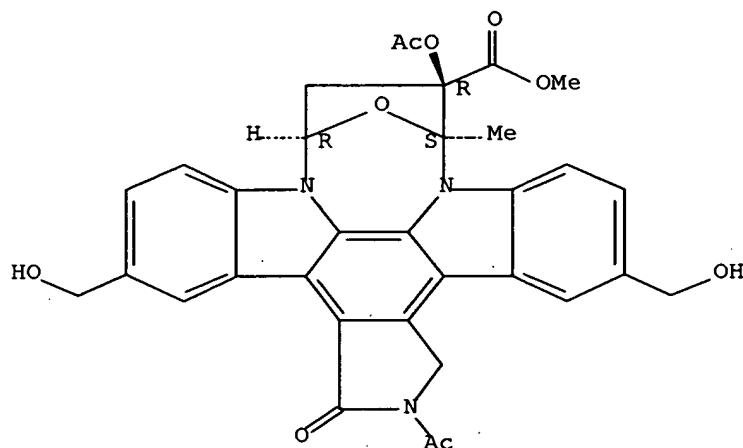
(prepn. of staurosporine and K-252a derivs. as protein kinase inhibitors for treatment of neurol. disorders)

RN 156177-91-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-

i)[1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-
2,3,9,10,11,12-hexahydro-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl
ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

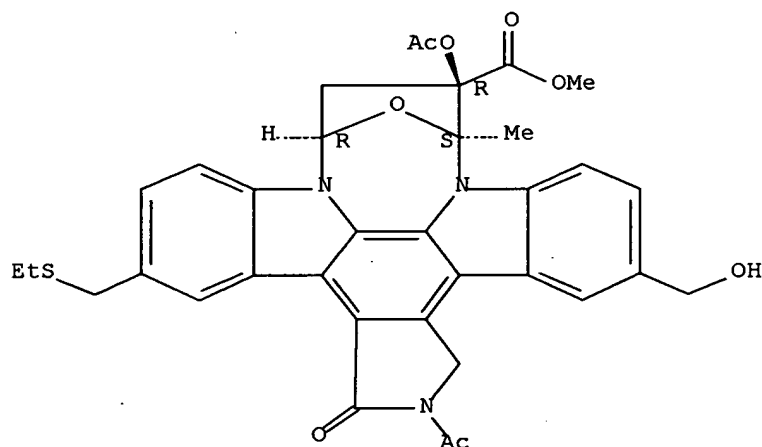
Absolute stereochemistry.



RN 156177-93-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
i)[1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-
[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-5-(hydroxymethyl)-9-methyl-
1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

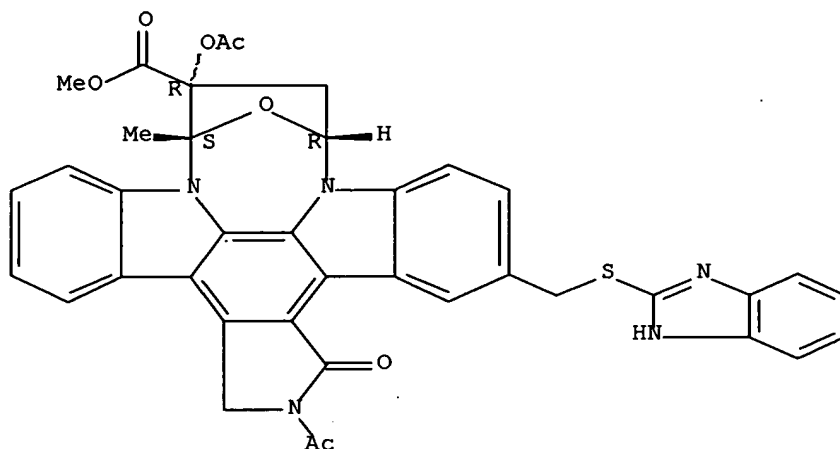
Absolute stereochemistry.



RN 167370-76-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
i)[1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-
[(1H-benzimidazol-2-ylthio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-,
methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

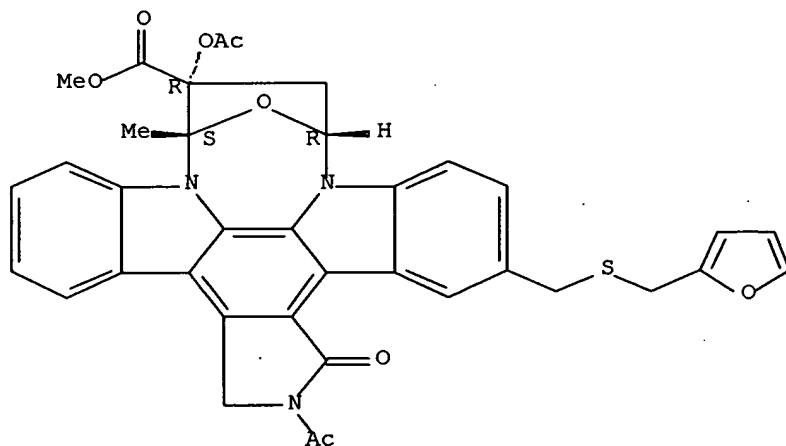
Absolute stereochemistry.



RN 167370-77-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(2-furanylmethyl)thio]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME) .

Absolute stereochemistry.

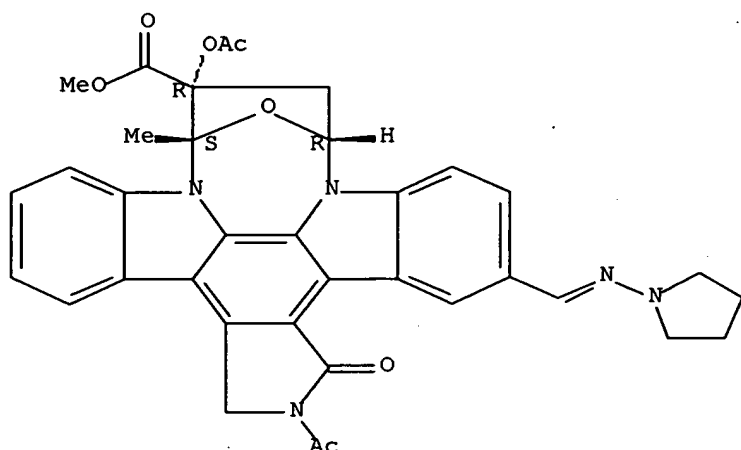


RN 167370-78-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(1-pyrrolidinylimino)methyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

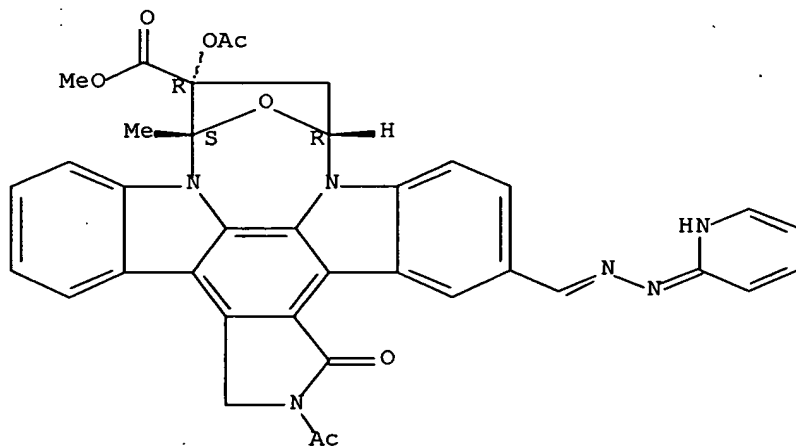
Absolute stereochemistry.

Double bond geometry unknown.



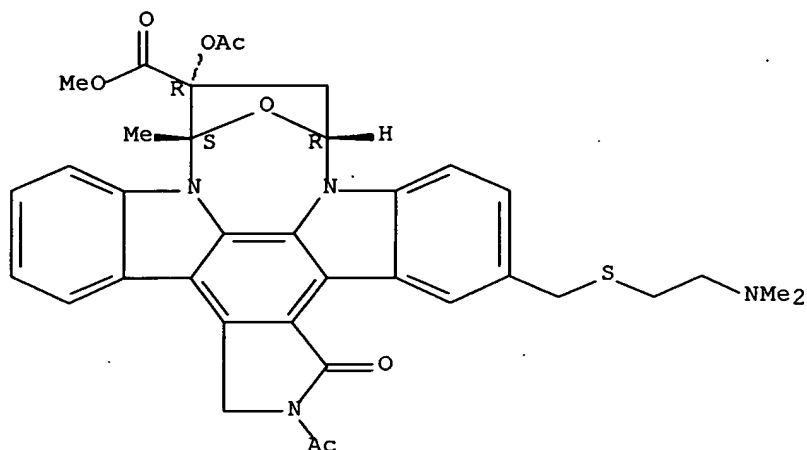
RN 167370-79-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(2-pyridinylhydrazono)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.



RN 167370-80-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

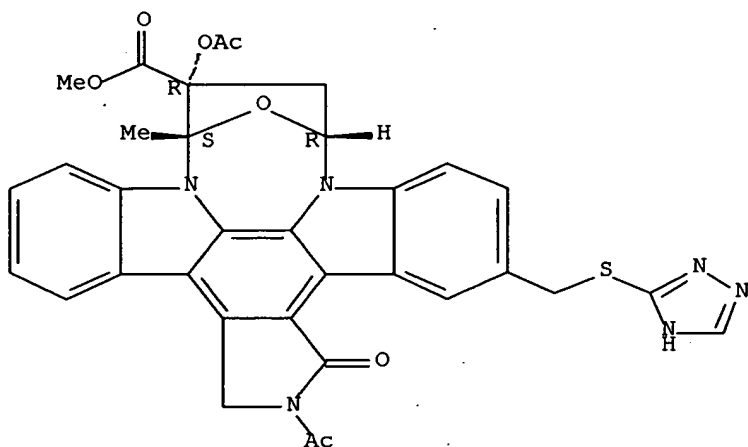
Absolute stereochemistry.



RN 167370-81-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(1H-1,2,4-triazol-3-ylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

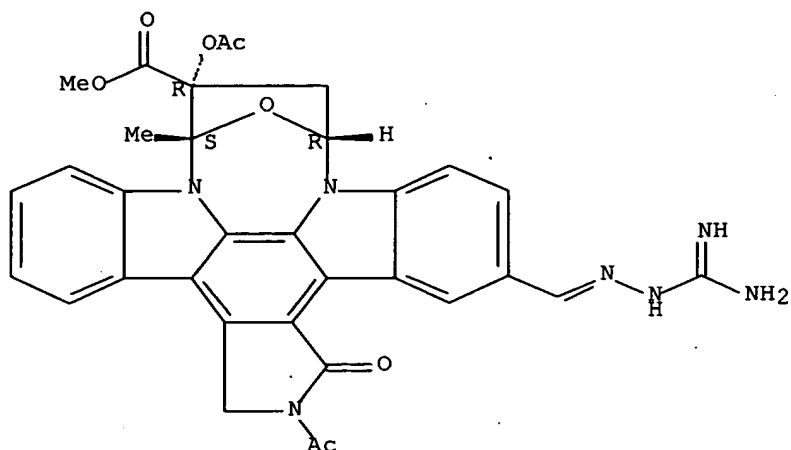


RN 167370-82-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[(aminoiminomethyl)hydrazono]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

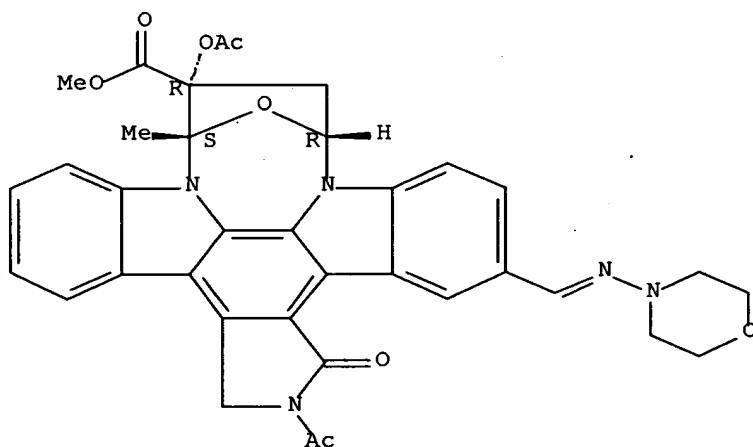


RN 167370-83-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-16-[(4-morpholinylimino)methyl]-1-oxo-methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

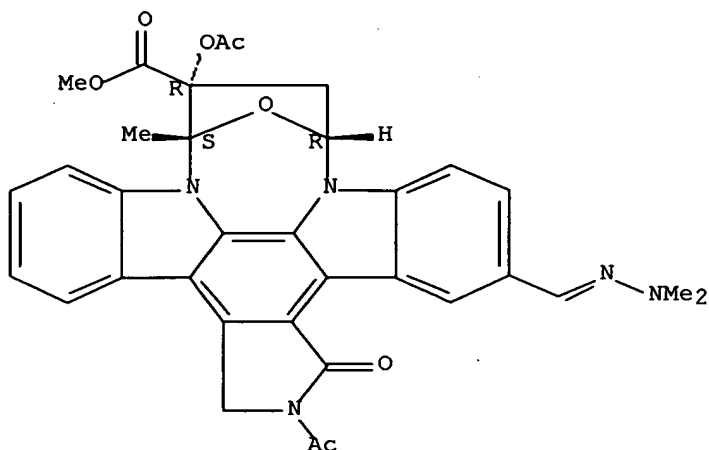


RN 167370-84-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(dimethylhydrazono)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

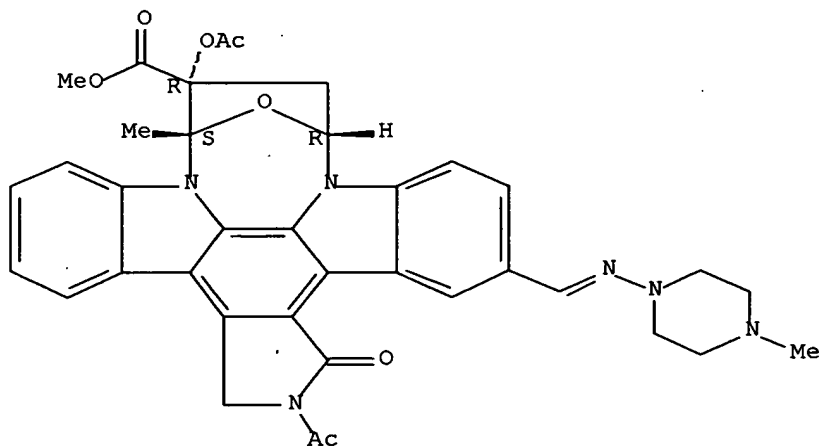


RN 167370-85-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-16-[[4-methyl-1-piperazinyl]imino]methyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

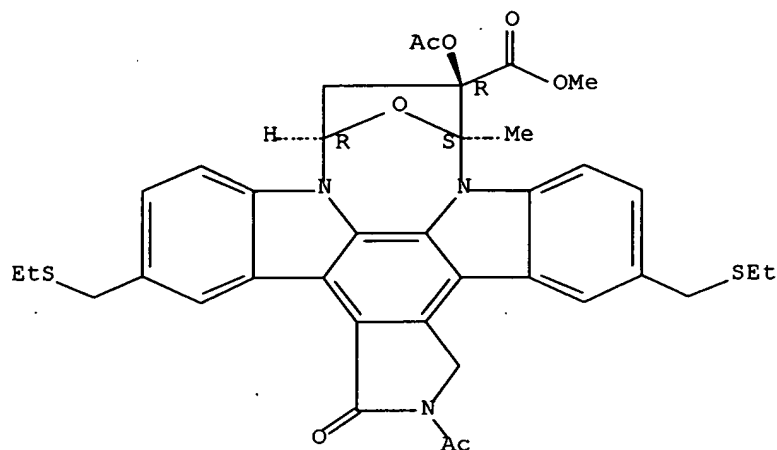
Double bond geometry unknown.



RN 173829-96-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

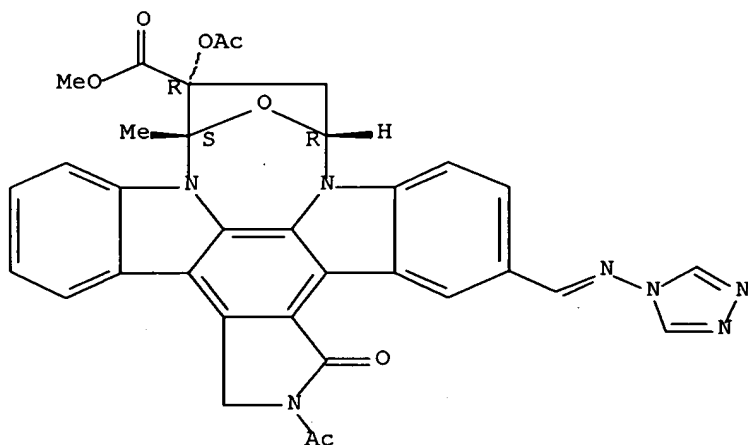


RN 178404-40-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(4H-1,2,4-triazol-4-ylimino)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

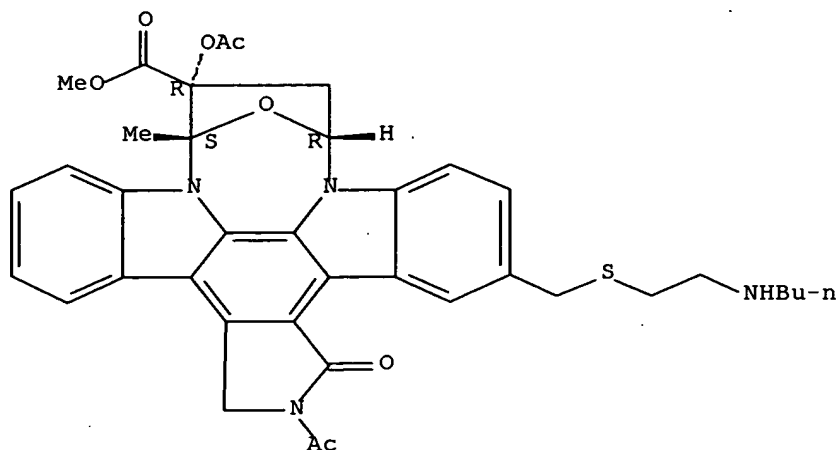
Double bond geometry unknown.



RN 178404-42-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[[2-(butylamino)ethyl]thio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

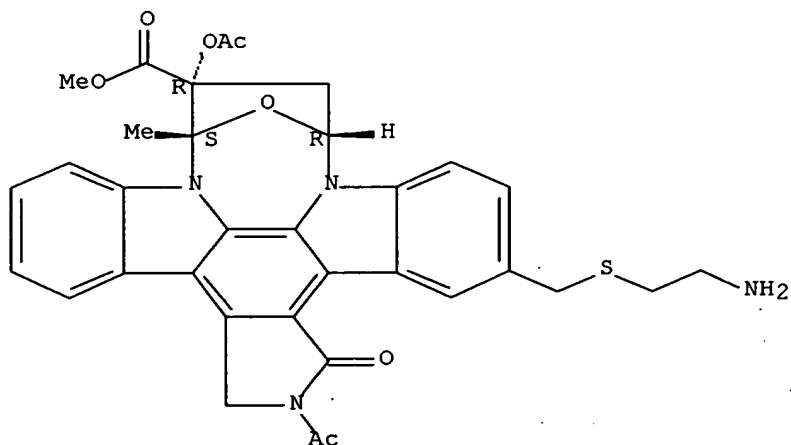
Absolute stereochemistry.



RN 178404-46-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[(2-aminoethyl)thio]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

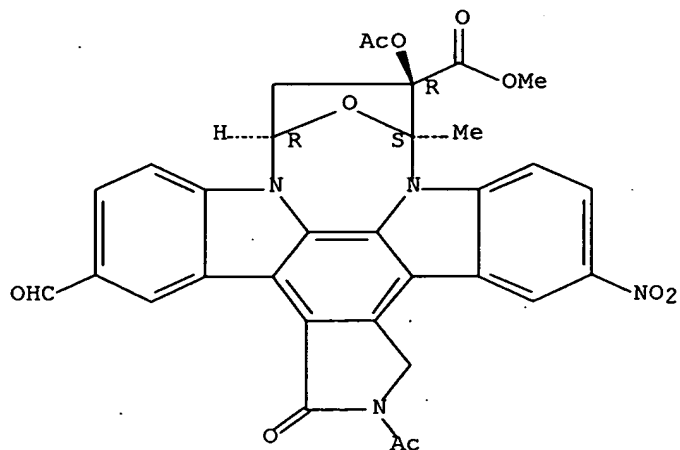
Absolute stereochemistry.



RN 178404-57-4 CAPLUS

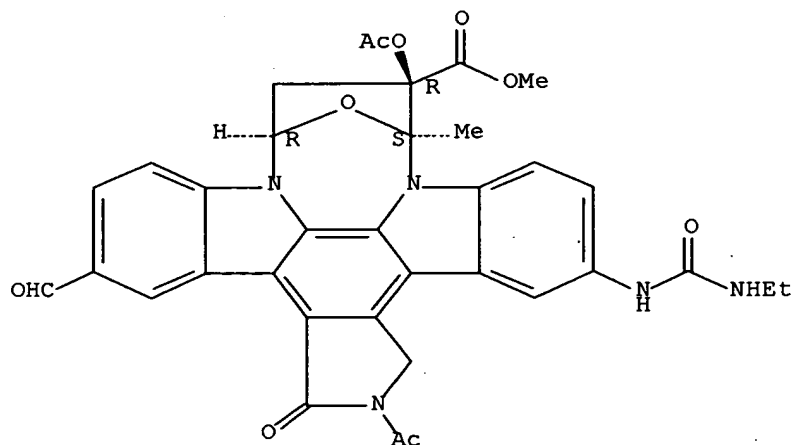
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-5-nitro-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



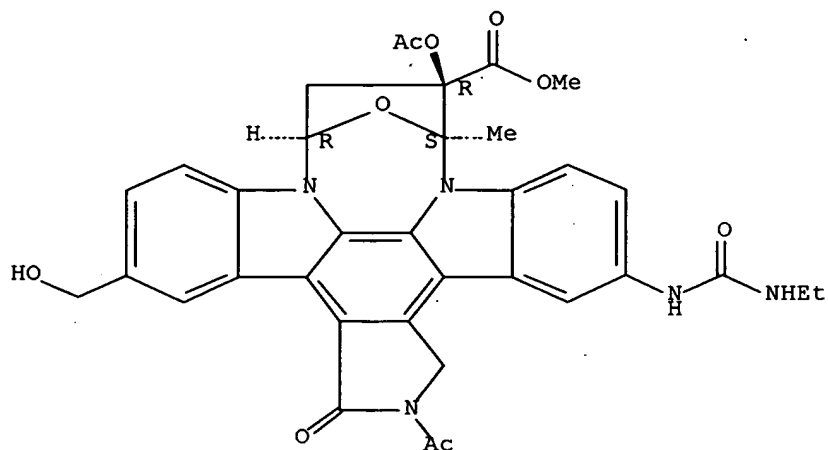
RN 178404-61-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-[(ethylamino)carbonyl]amino]-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 178404-62-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-[(ethylamino)carbonyl]amino]-2,3,9,10,11,12-hexahydro-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



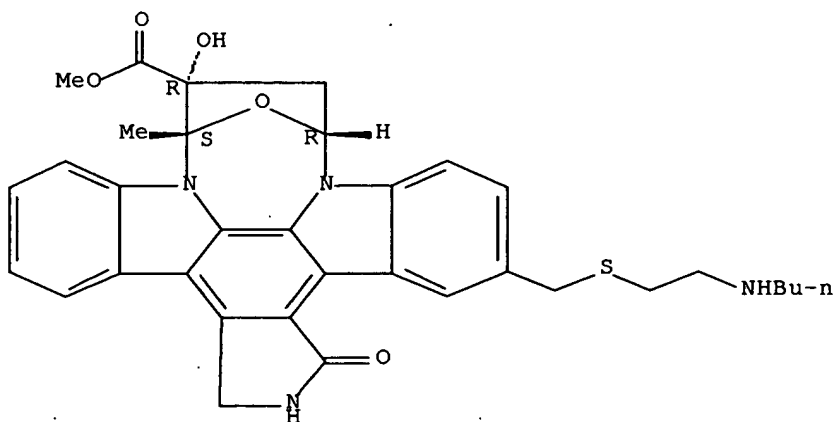
IT 178404-43-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses (staurosporine alkaloidal K 252a analogs as protein kinase inhibitors for treatment of neurol. disorders))

RN 178404-43-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[2-(butylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 77 THERE ARE 77 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 33 OF 54 CAPLUS COPYRIGHT 2003 ACS
AN 1998:42283 CAPLUS
DN 128:110888
TI Use of K-252a derivative for the treatment of peripheral or central
nerve

disorders, and cytokine overproduction

IN Engber, Thomas M.; Haun, Forrest A.; Saporito, Michael S.; Aimone, Lisa
D.; Miller, Matthew S.; Knight, Ernest, Jr.

PA Cephalon, Inc., USA; Engber, Thomas M.; Haun, Forrest A.; Saporito,
Michael S.; Aimone, Lisa D.; Miller, Matthew S.; Knight, Ernest, Jr.

SO PCT Int. Appl., 35 pp.

CODEN: PIXXD2

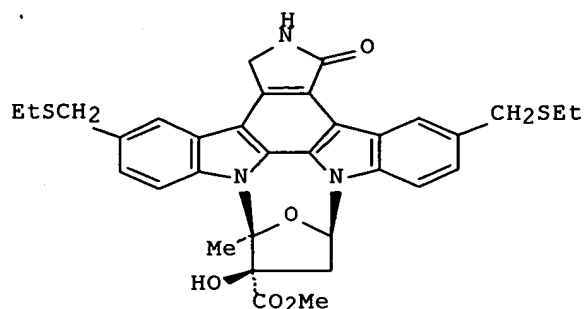
DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|--|----------|-----------------|----------|
| PI | WO 9749406 | A1 | 19971231 | WO 1997-US10898 | 19970624 |
| | W: | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | |
| | CA 2258662 | AA | 19971231 | CA 1997-2258662 | 19970624 |
| | AU 9734090 | A1 | 19980114 | AU 1997-34090 | 19970624 |
| | AU 721942 | B2 | 20000720 | | |
| | EP 912184 | A1 | 19990506 | EP 1997-930203 | 19970624 |
| | EP 912184 | B1 | 20020925 | | |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, | | | |
| FI | CN 1228024 | A | 19990908 | CN 1997-197341 | 19970624 |
| | BR 9710693 | A | 20000111 | BR 1997-10693 | 19970624 |
| | JP 2000514420 | T2 | 20001031 | JP 1998-503444 | 19970624 |
| | US 6184217 | B1 | 20010206 | US 1997-881679 | 19970624 |
| | RU 2183959 | C2 | 20020627 | RU 1999-101117 | 19970624 |
| | AT 224718 | E | 20021015 | AT 1997-930203 | 19970624 |
| | NO 9806111 | A | 19990223 | NO 1998-6111 | 19981223 |
| | KR 2000022217 | A | 20000425 | KR 1998-710637 | 19981224 |
| PRAI | US 1996-20406P | P | 19960625 | | |
| | WO 1997-US10898 | W | 19970624 | | |

GI



AB Therapeutic methodologies are disclosed which use a ring-substituted deriv. (I) of the indolocarbazole K-252a. I is useful for treating peripheral neuropathies, central neuronal degeneration and cytokine overprodn. Typical diseases related to the above are peripheral neuropathy, Alzheimer's disease, Parkinson's disease and autoimmune and allergic conditions.

IT 156177-65-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

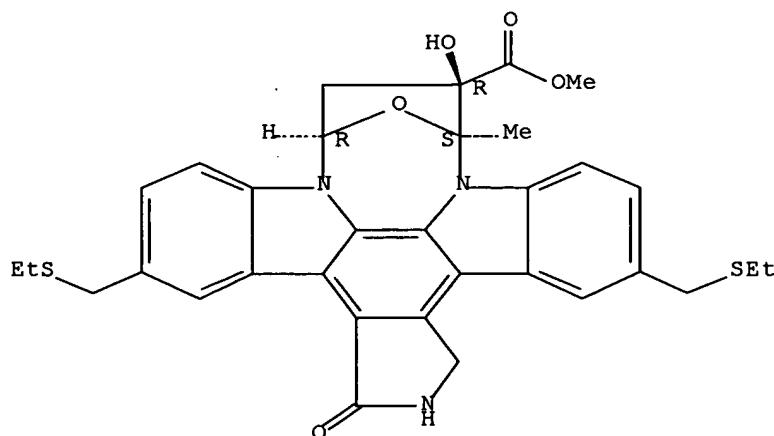
(Uses)

(K-252a deriv. for treatment of peripheral or central nerve disorders and cytokine overprodn.)

RN 156177-65-0 CAPLUS

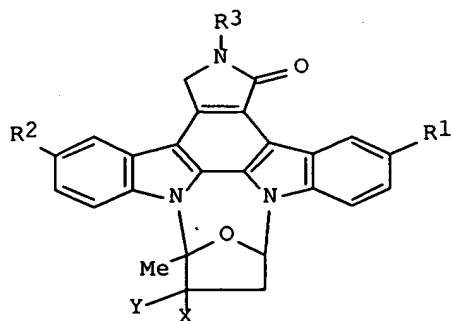
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 35 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1998:1484 CAPLUS
 DN 128:75237
 TI synthesis and neurotropic activity of selected derivatives of K-252a
 IN Hudkins, Robert L.; Mallamo, John P.; Hamano, Masami; Tanaka, Reiko;
 Murakata, Chikara
 PA Cephalon, Inc., USA; Kyowa Hakko Kogyo Co., Ltd.
 SO PCT Int. Appl., 150 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 9746565 | A1 | 19971211 | WO 1997-US9448 | 19970602 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | AU 9732253 | A1 | 19980105 | AU 1997-32253 | 19970602 |
| | AU 716656 | B2 | 20000302 | | |
| | EP 918777 | A1 | 19990602 | EP 1997-927906 | 19970602 |
| | EP 918777 | B1 | 20020828 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, | | | | |
| FI | BR 9711093 | A | 19990817 | BR 1997-11093 | 19970602 |
| | CN 1226893 | A | 19990825 | CN 1997-196985 | 19970602 |
| | NZ 333018 | A | 20000526 | NZ 1997-333018 | 19970602 |
| | JP 2000511902 | T2 | 20000912 | JP 1998-500751 | 19970602 |
| | AT 222912 | E | 20020915 | AT 1997-927906 | 19970602 |
| | ES 2183184 | T3 | 20030316 | ES 1997-927906 | 19970602 |
| | NO 9805622 | A | 19990202 | NO 1998-5622 | 19981202 |
| | KR 2000016289 | A | 20000325 | KR 1998-709862 | 19981203 |
| | MX 9810199 | A | 20000531 | MX 1998-10199 | 19981203 |
| PRAI | US 1996-657366 | A | 19960603 | | |
| | WO 1997-US9448 | W | 19970602 | | |
| OS | MARPAT 128:75237 | | | | |
| GI | | | | | |



AB Title compds. I [R1,R2 = H, Me, OH, HOCH2, N3, NO2, (un)substituted NH2, (un)substituted alkoxy, Cl, Br, (un)substituted alkylthio, (un)substituted alkenyl, (un)substituted alkynyl, (un)substituted aryl, (un)substituted heteroaryl; R3 = H, COMe; Y = OH, OAc; X = CO2Me, CH2OH] are prepd. I are useful for enhancing the function and/or survival of a trophic factor responsive cell. I inhibit interleukin-2 prodn. and have immunosuppressive activity. Thus, I [R1, R2 = (CH2)2SMe, Y = OH, X = CO2Me, R3 = H] (II) was prepd. by redn. of the corresponding COCH2SMe substituted deriv. II showed 294% activity when tested at 300nM for spinal cord ChAT activity and 260% activity when tested at 250nM for

basal

forebrain ChAT activity as compared to the control.

IT 200632-36-6P 200632-38-8P 200632-40-2P
200632-41-3P 200632-43-5P 200632-44-6P
200632-48-0P 200632-50-4P 200632-52-6P
200632-57-1P 200632-59-3P 200632-61-7P
200632-62-8P 200632-68-4P 200632-71-9P
200632-74-2P 200632-75-3P 200632-78-6P
200632-79-7P 200632-85-5P 200632-88-8P
200633-00-7P 200633-04-1P 200633-08-5P
200633-12-1P 200633-14-3P 200633-20-1P
200633-22-3P 200633-68-7P 200633-70-1P
200633-72-3P 200633-75-6P 200633-95-0P
200634-01-1P 200634-04-4P 200634-07-7P
200634-10-2P 200634-40-8P 200634-44-2P
200634-50-0P 200634-74-8P 200634-85-1P
200635-16-1P 200635-41-2P 200635-46-7P
200635-54-7P 200635-57-0P 200635-66-1P
200635-72-9P 200635-84-3P 200635-90-1P
200636-03-9P 200636-14-2P 200637-36-1P
200637-37-2P 200637-43-0P 200637-49-6P

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological

study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(synthesis and neurotropic activity of selected derivs. of K-252a)

RN 200632-36-6 CAPLUS

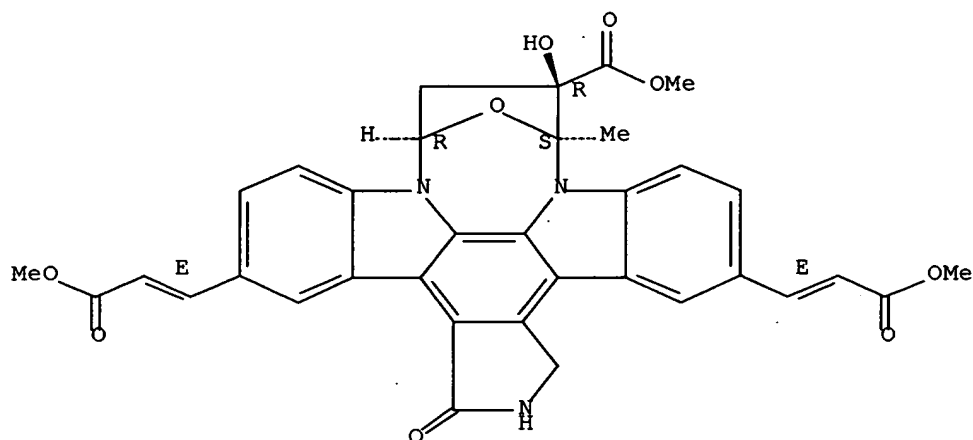
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis[(1E)-3-methoxy-3-oxo-1-propenyl]-9-methyl-1-oxo-,

methyl

ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

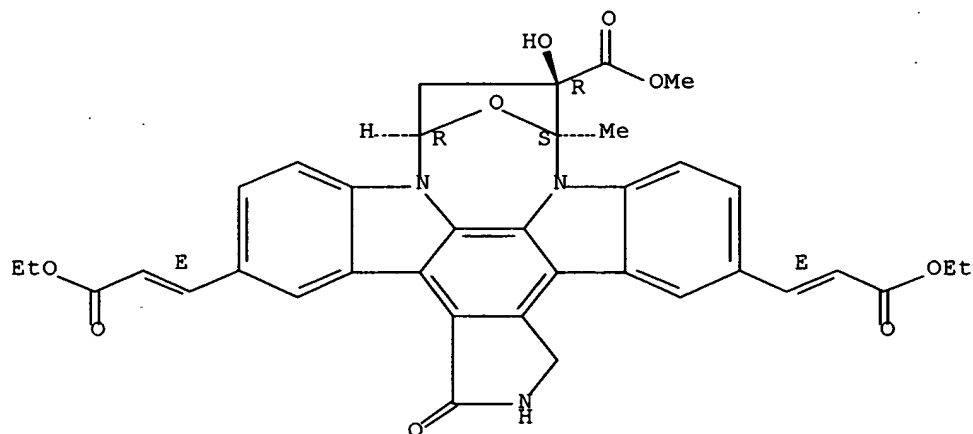
Absolute stereochemistry.

Double bond geometry as shown.



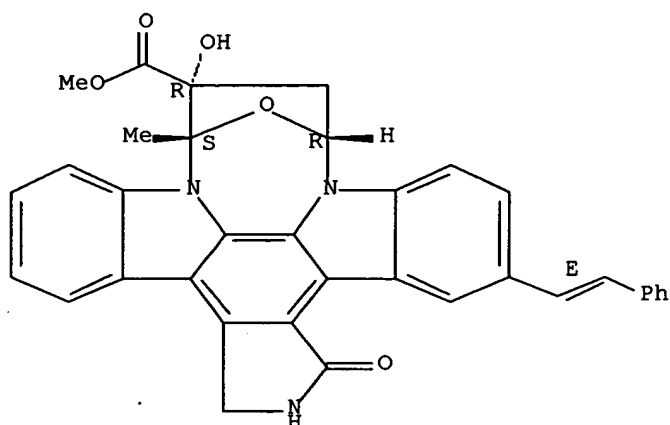
RN 200632-38-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(1E)-3-ethoxy-3-oxopropenyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 200632-40-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-(2-phenylethenyl)-, methyl ester, [9S-[9.alpha.,10.beta.,12.alpha.,16(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

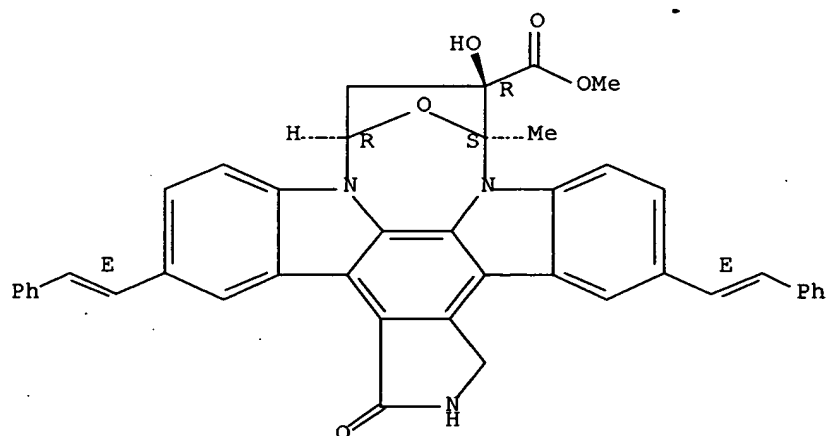


RN 200632-41-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis(2-phenylethenyl)-, methyl ester, [9S-[5(E),9.alpha.,10.beta.,12.alpha.,16(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

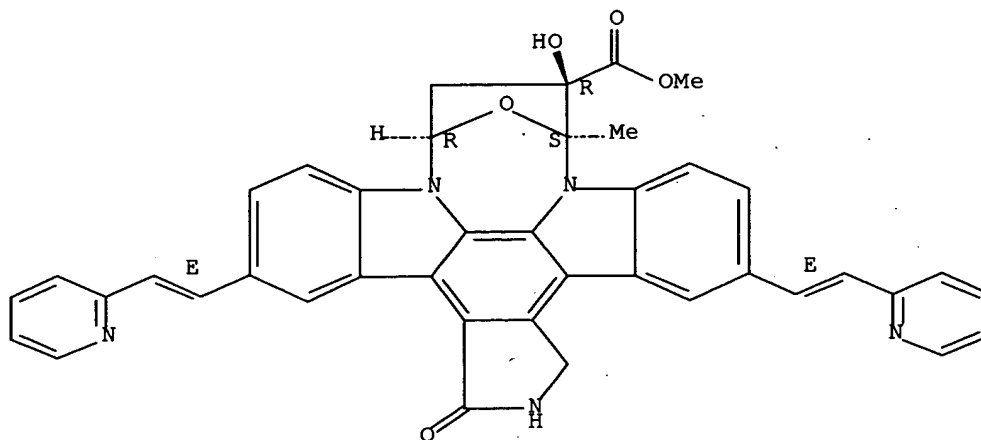


RN 200632-43-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

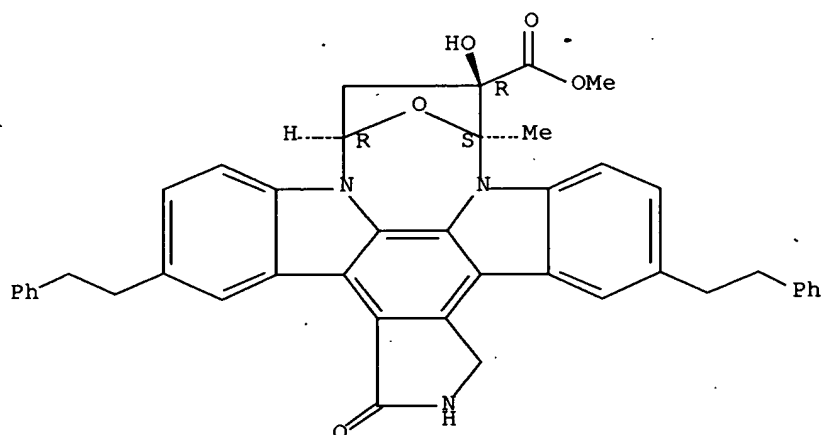
Double bond geometry as shown.



RN 200632-44-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis(2-phenylethyl)-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

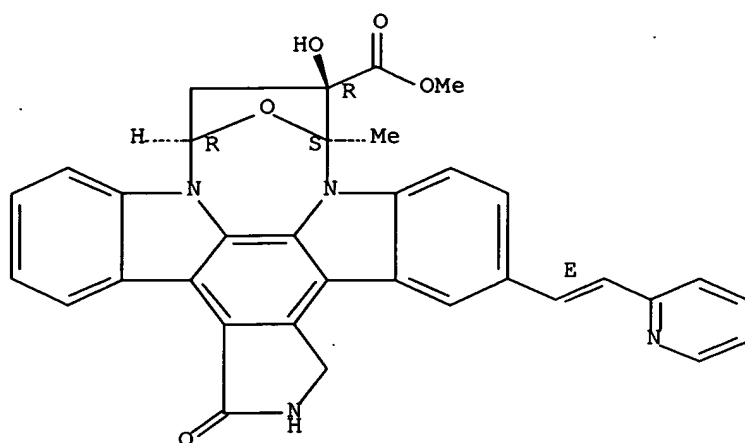


RN 200632-48-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

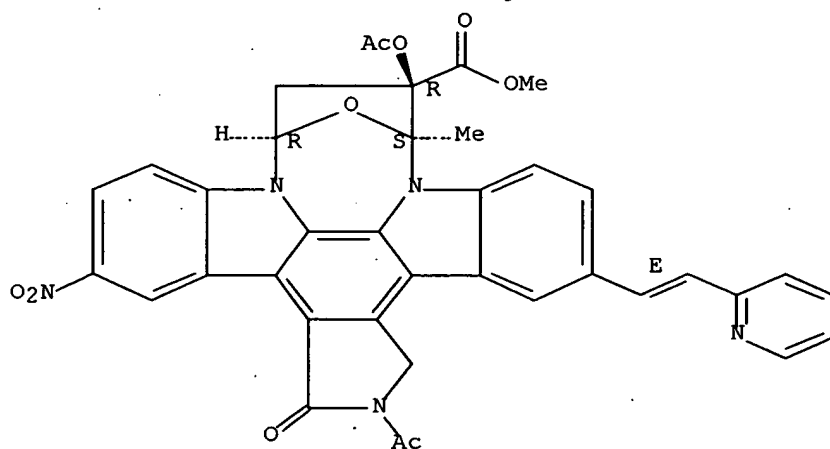
Absolute stereochemistry.

Double bond geometry as shown.



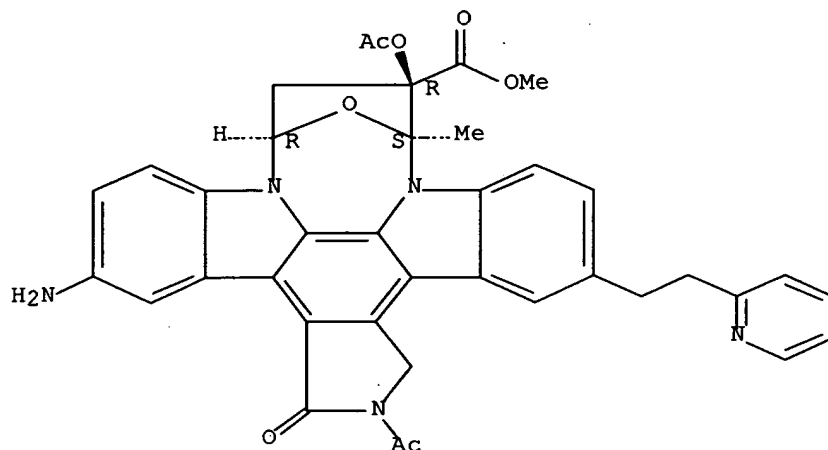
RN 200632-50-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-16-nitro-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 200632-52-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-amino-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

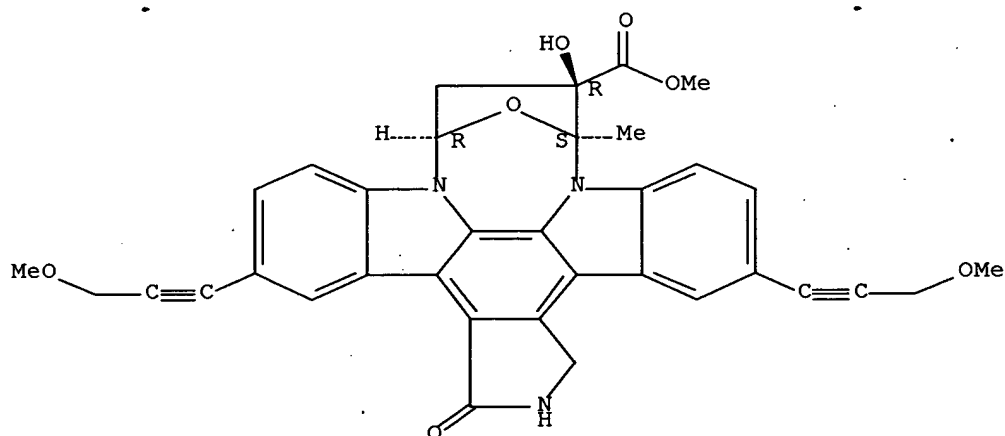
Absolute stereochemistry.



RN 200632-57-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(3-methoxy-1-propynyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

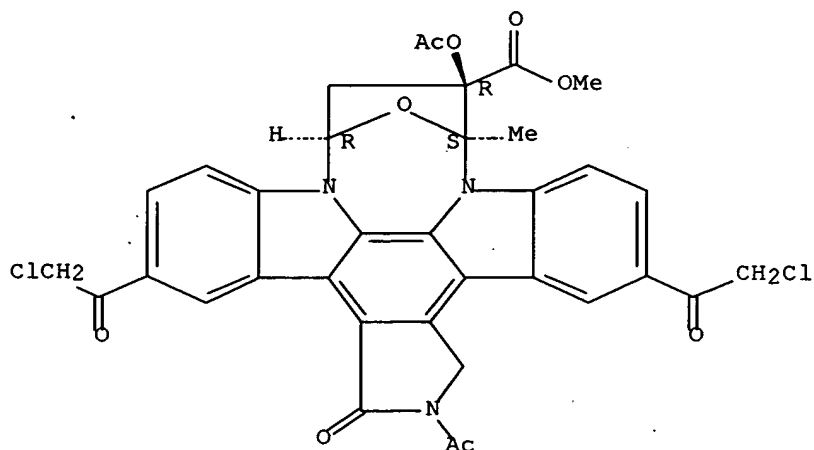
Absolute stereochemistry.



RN 200632-59-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis(chloroacetyl)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

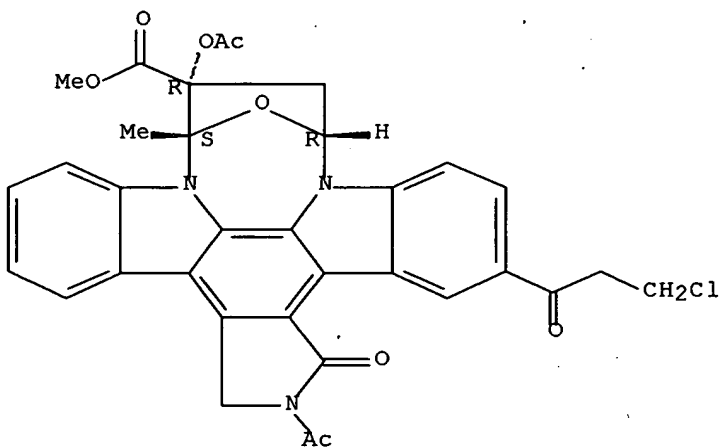
Absolute stereochemistry.



RN 200632-61-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-(3-chloro-1-oxopropyl)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

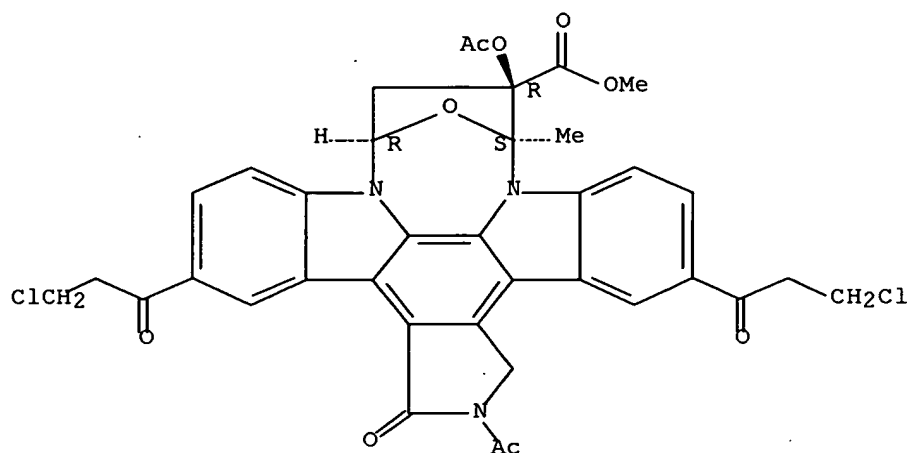
Absolute stereochemistry.



RN 200632-62-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis(3-chloro-1-oxopropyl)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

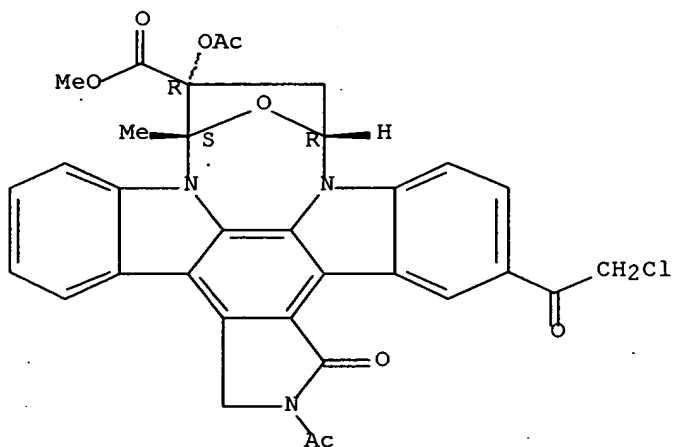
Absolute stereochemistry.



RN 200632-68-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-(chloroacetyl)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

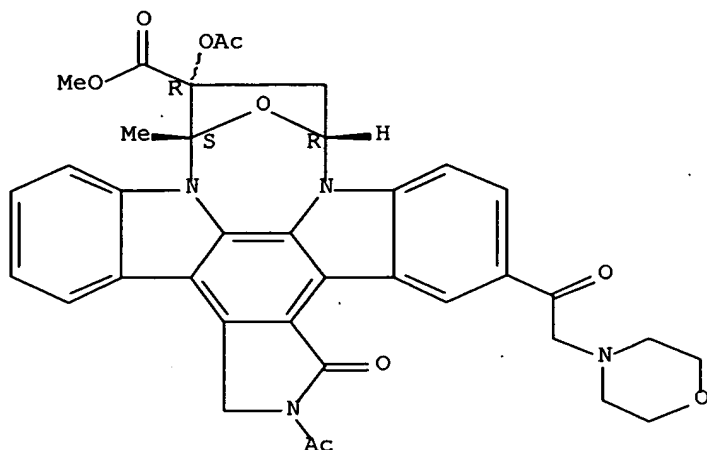
Absolute stereochemistry.



RN 200632-71-9 CAPLUS

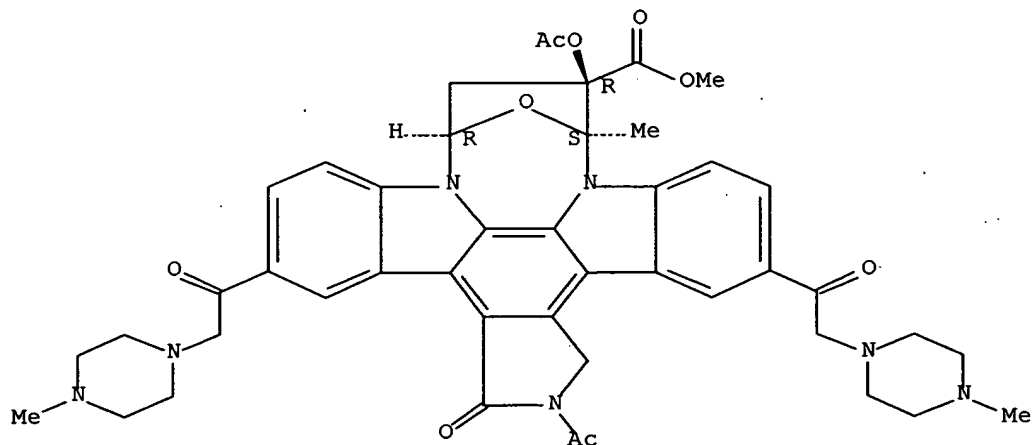
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-16-(4-morpholinylacetyl)-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



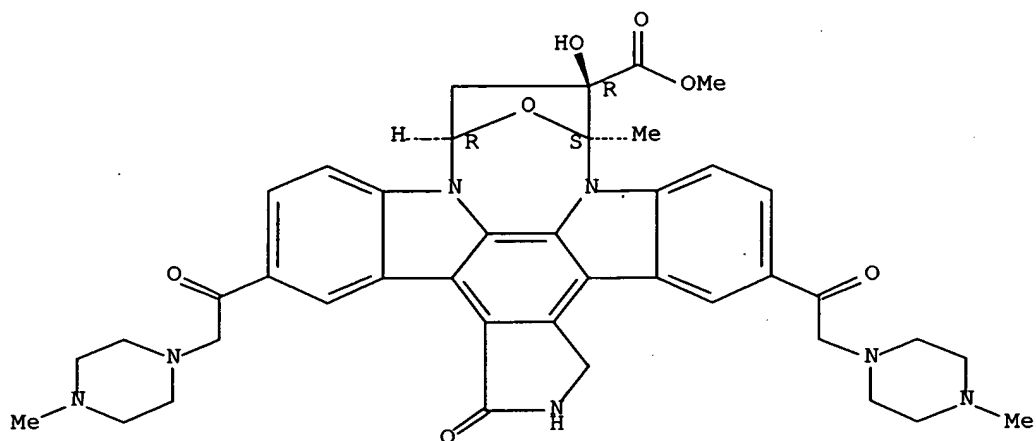
RN 200632-74-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-5,16-bis[(4-methyl-1-piperazinyl)acetyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200632-75-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[(4-methyl-1-piperazinyl)acetyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

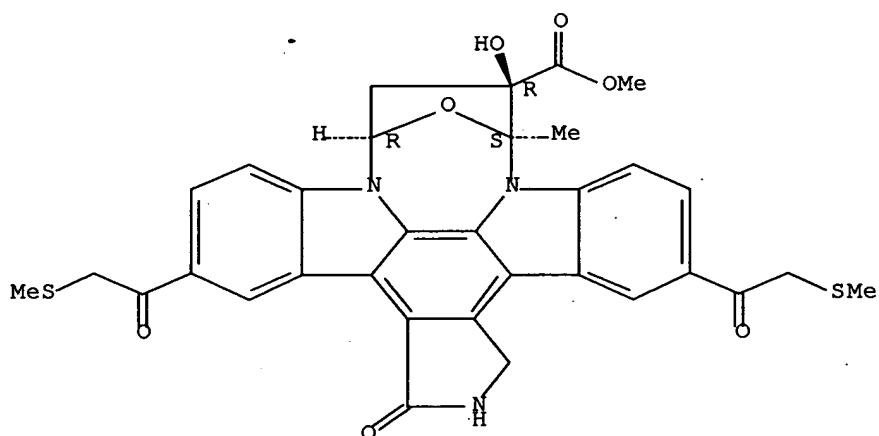
Absolute stereochemistry.



RN 200632-78-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[(methylthio)acetyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

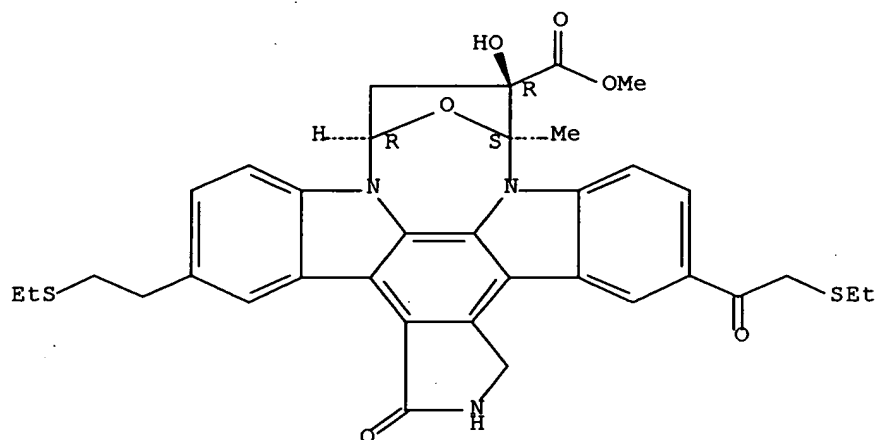
Absolute stereochemistry.



RN 200632-79-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[(ethylthio)acetyl]-16-[2-(ethylthio)ethyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

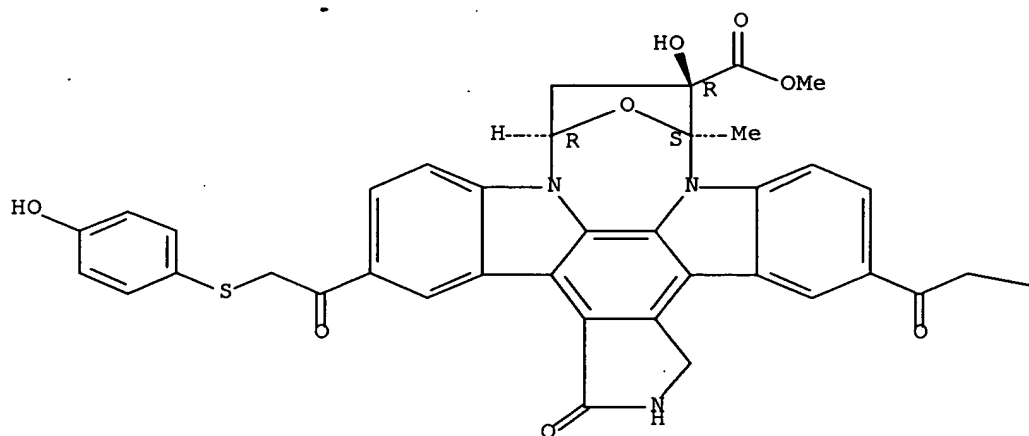


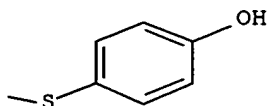
RN 200632-85-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis[[(4-hydroxyphenyl)thio]acetyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

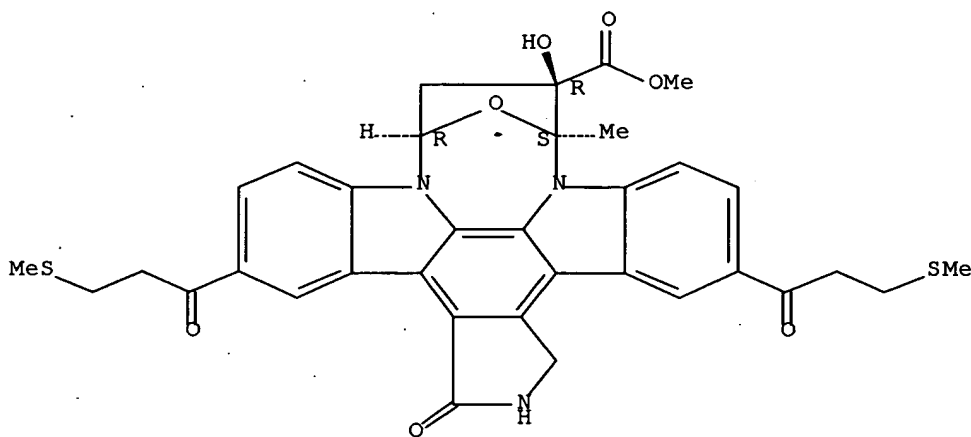
PAGE 1-A





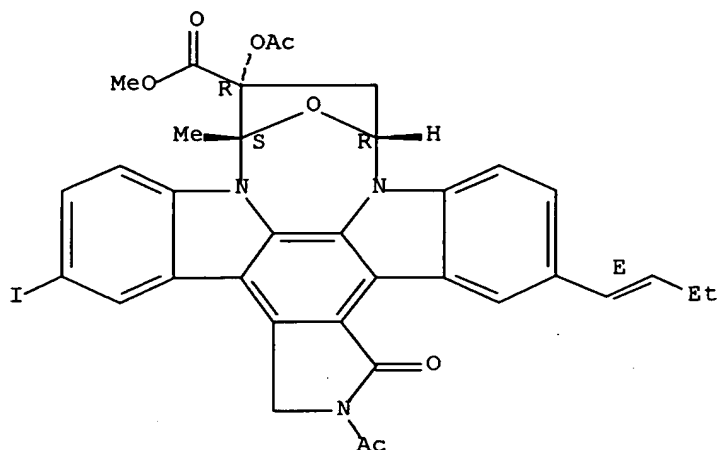
RN 200632-88-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[3-(methylthio)-1-oxopropyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



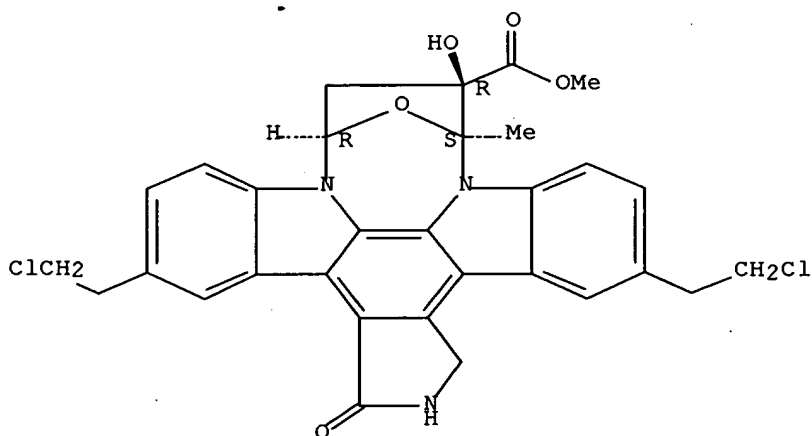
RN 200633-00-7 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis[3-(dimethylamino)-1-propenyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, [9S-[5(E),9.alpha.,10.beta.,12.alpha.,16(E)]]- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



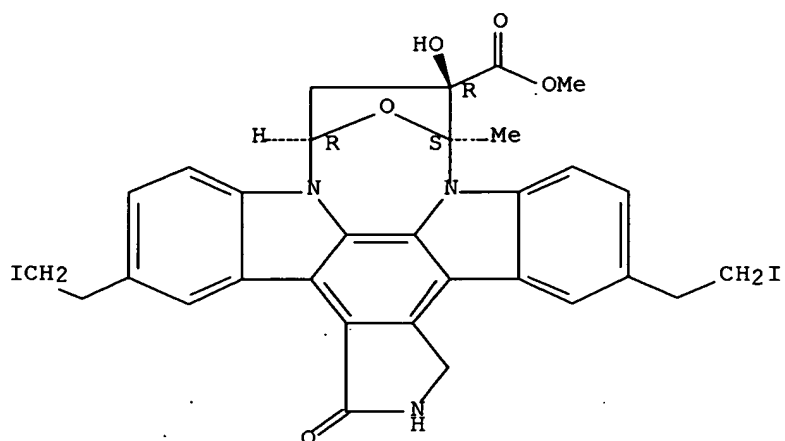
RN 200633-12-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis(2-chloroethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200633-14-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(2-iodoethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

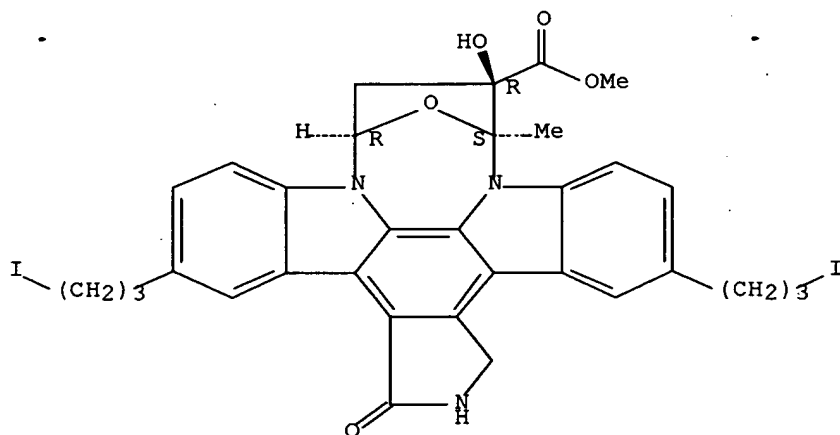
Absolute stereochemistry.



RN 200633-20-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(3-iodopropyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

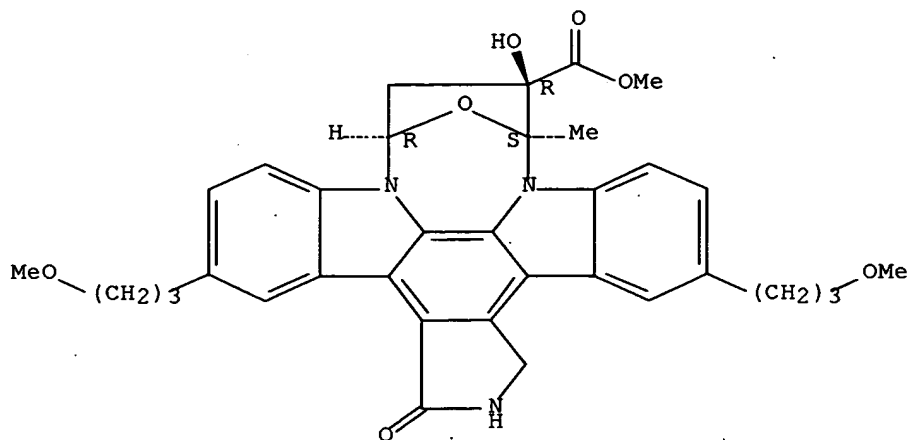
Absolute stereochemistry.



RN 200633-22-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(3-methoxypropyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200633-68-7 CAPLUS

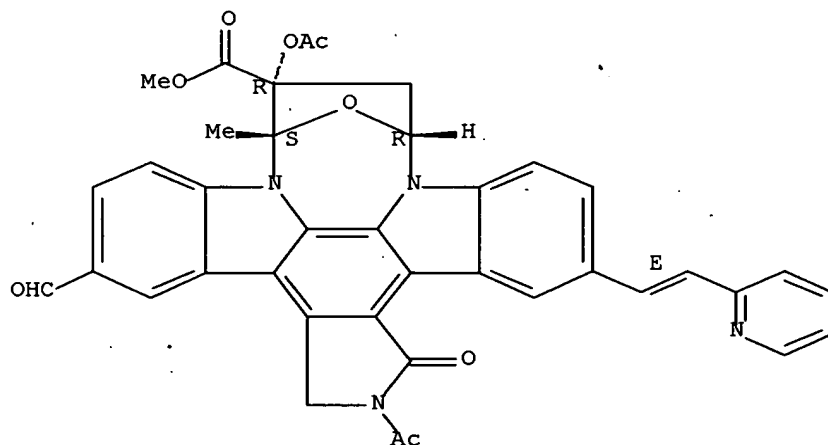
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-formyl-

2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-,

methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

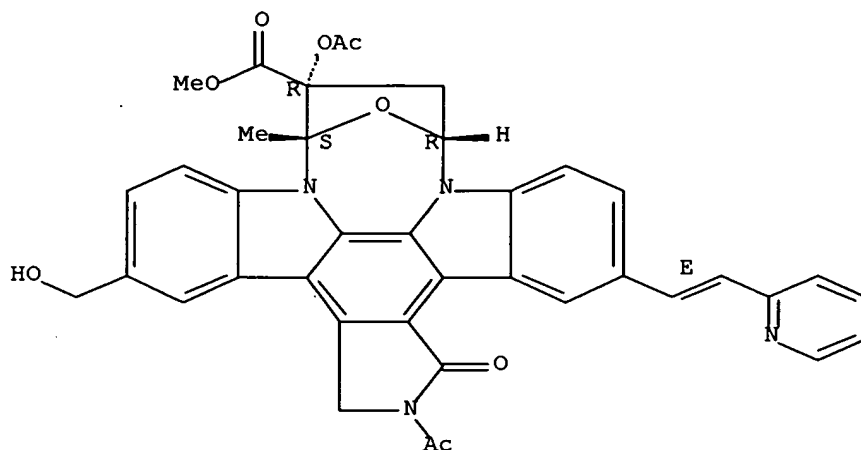


RN 200633-70-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5-(hydroxymethyl)-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

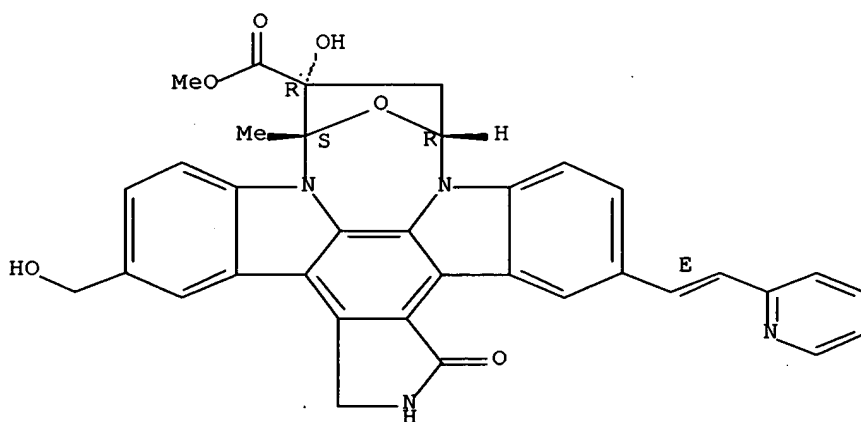
Absolute stereochemistry.

Double bond geometry as shown.



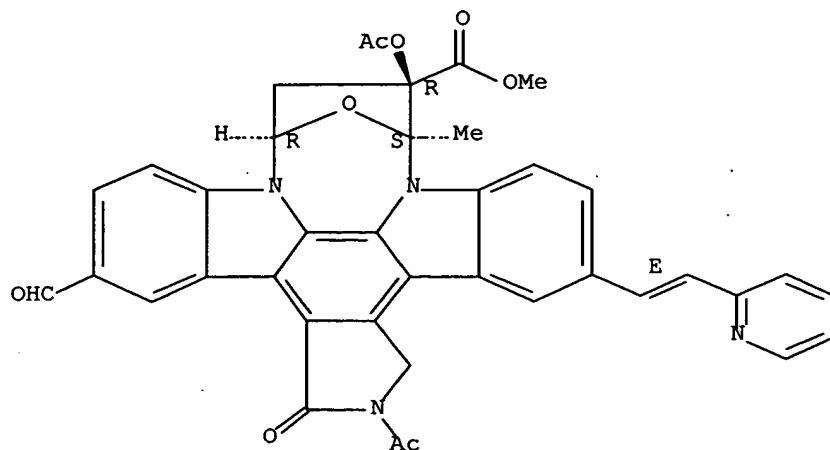
RN 200633-72-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME).

Absolute stereochemistry.
 Double bond geometry as shown. .



RN 200633-75-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

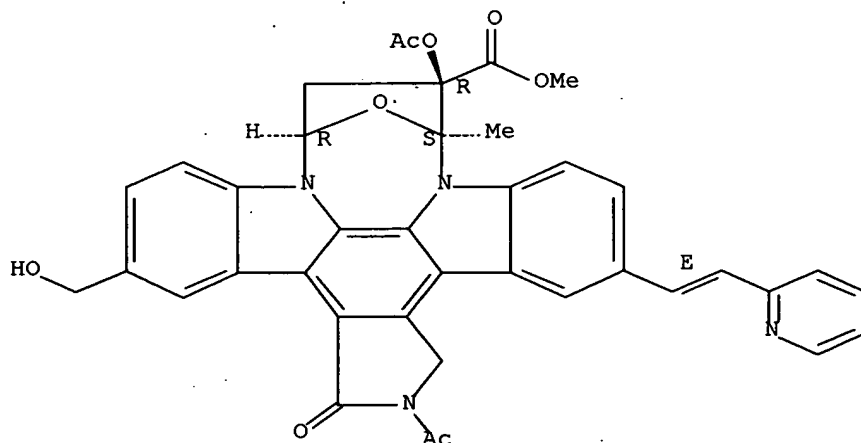


RN 200634-04-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-(hydroxymethyl)-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

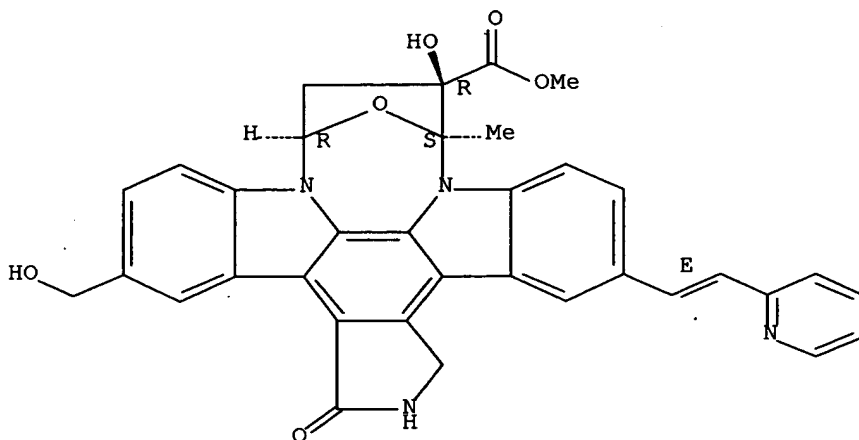


RN 200634-07-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-10-hydroxy-16-(hydroxymethyl)-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

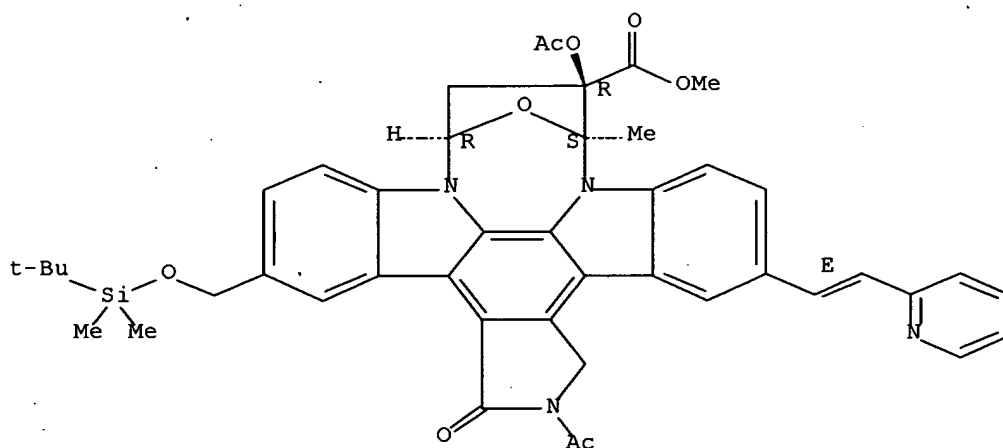
Double bond geometry as shown.



RN 200634-10-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

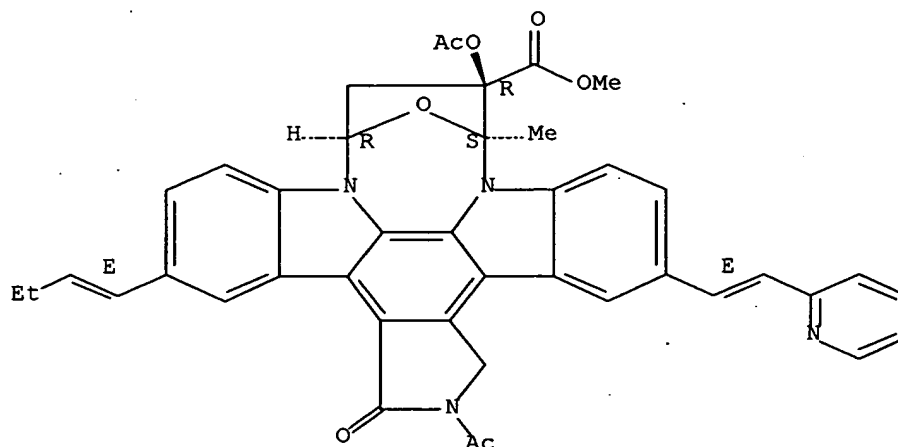
Absolute stereochemistry.
Double bond geometry as shown.



RN 200634-40-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-(1-butenyl)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethenyl]-, methyl ester, [9S-[5(E),9.alpha.,10.beta.,12.alpha.,16(E)]]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

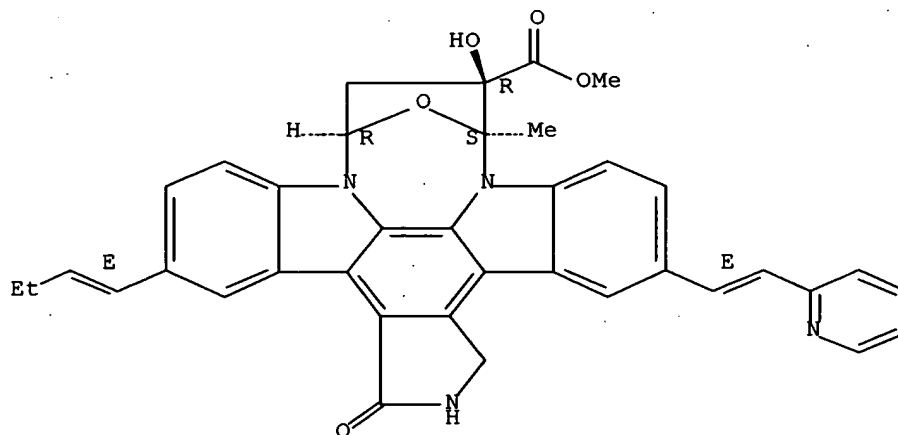


RN 200634-44-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-(1E)-1-butenyl-2,3,9,10,11,12-

hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

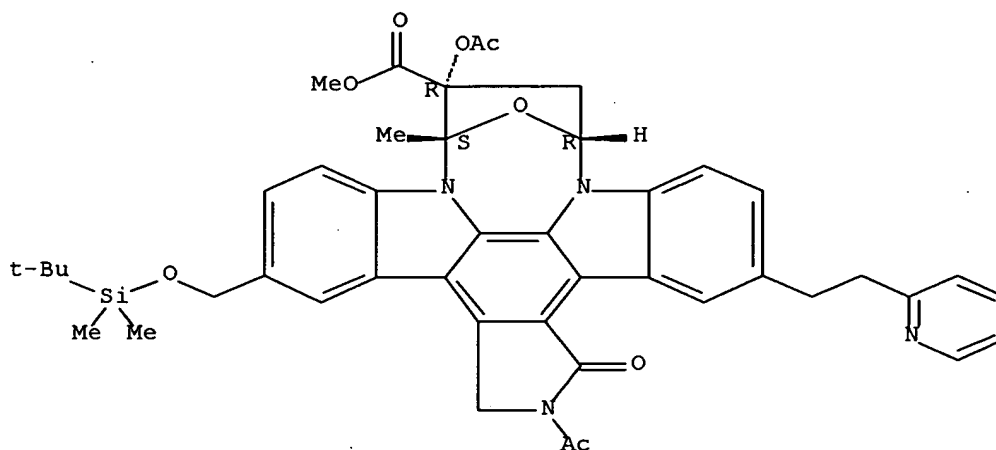


RN 200634-50-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)-(9CI)

(CA INDEX NAME)

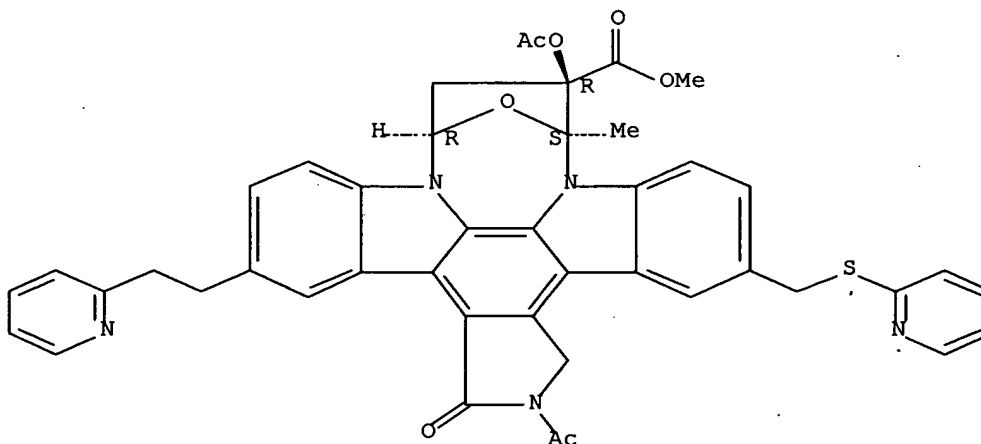
Absolute stereochemistry.



RN 200634-74-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[2-(2-pyridinyl)ethyl]-5-[(2-pyridinylthio)methyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

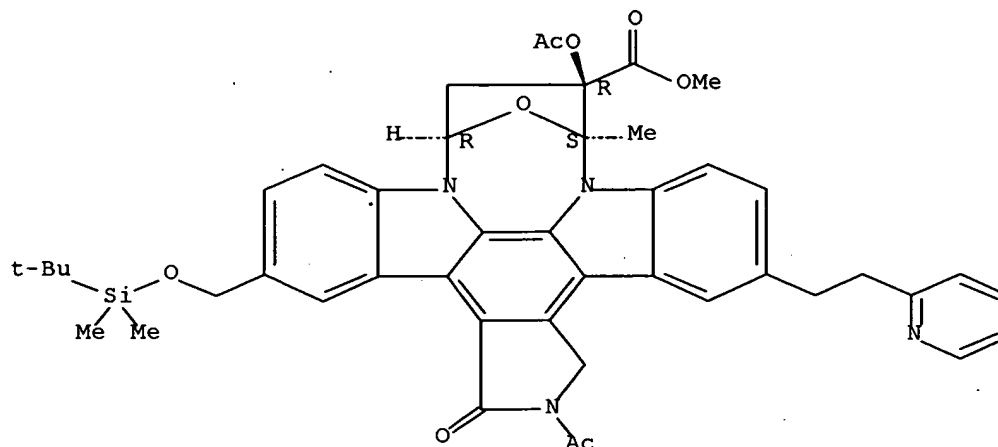


RN 200634-85-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)-(9CI)

(CA INDEX NAME)

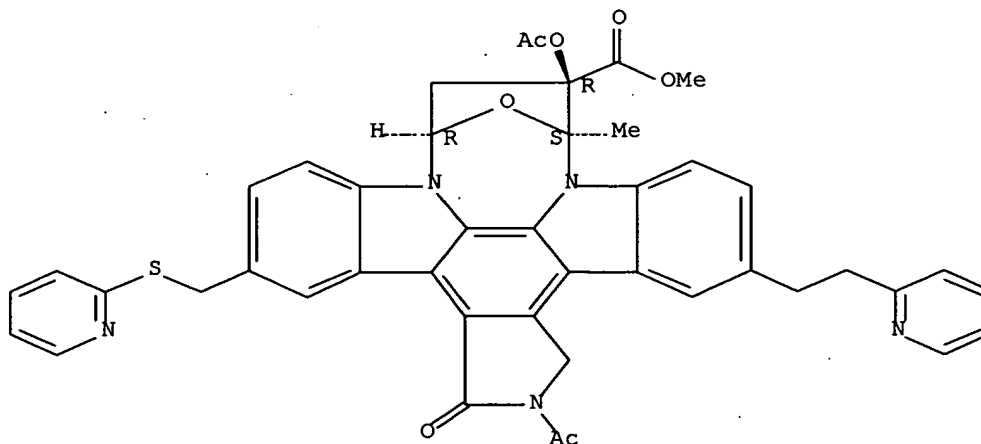
Absolute stereochemistry.



RN 200635-16-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-16-[(2-pyridinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

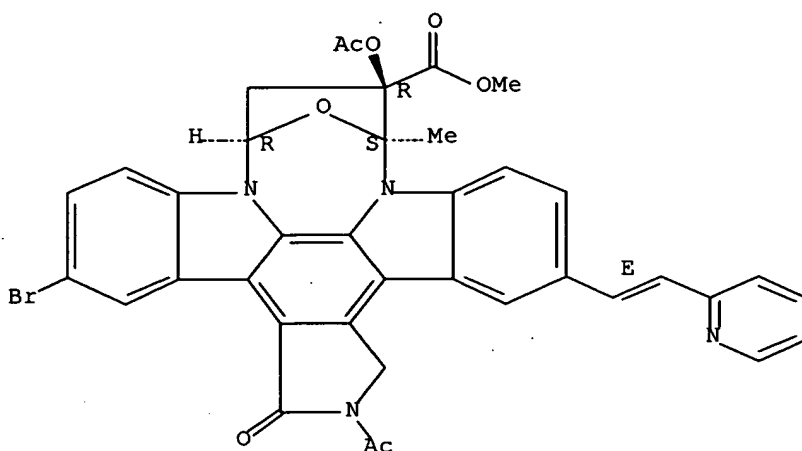


RN 200635-41-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-bromo-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

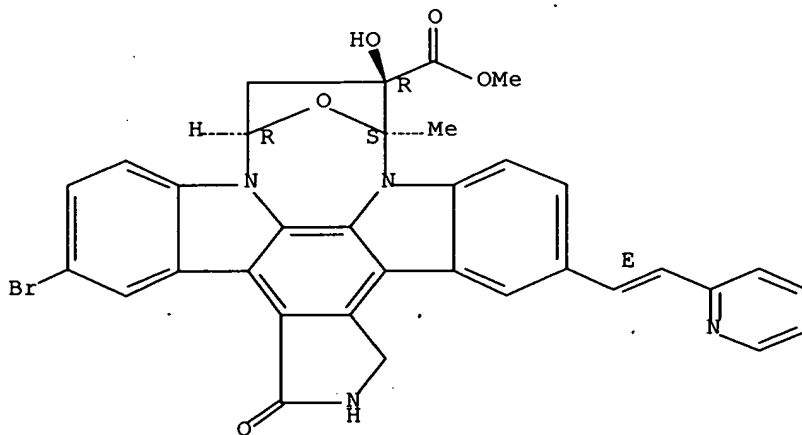


RN 200635-46-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-bromo-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

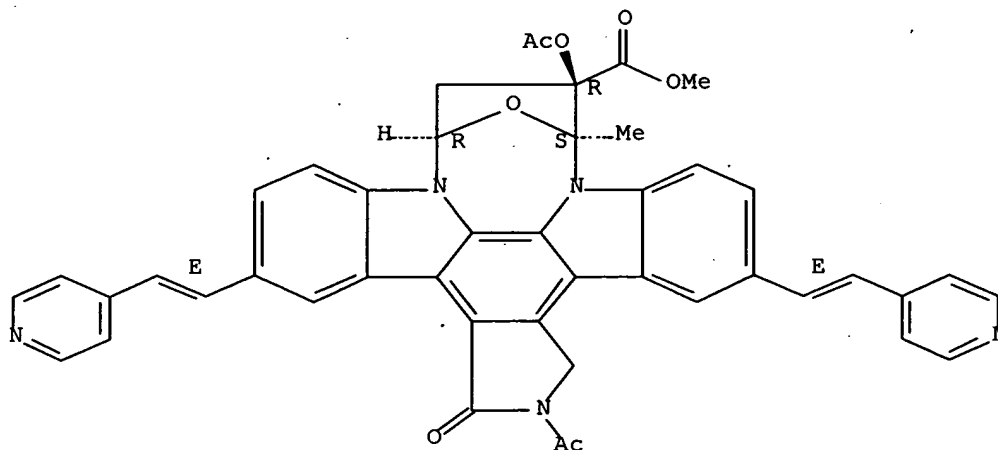


RN 200635-54-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5,16-bis[(1E)-2-(4-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

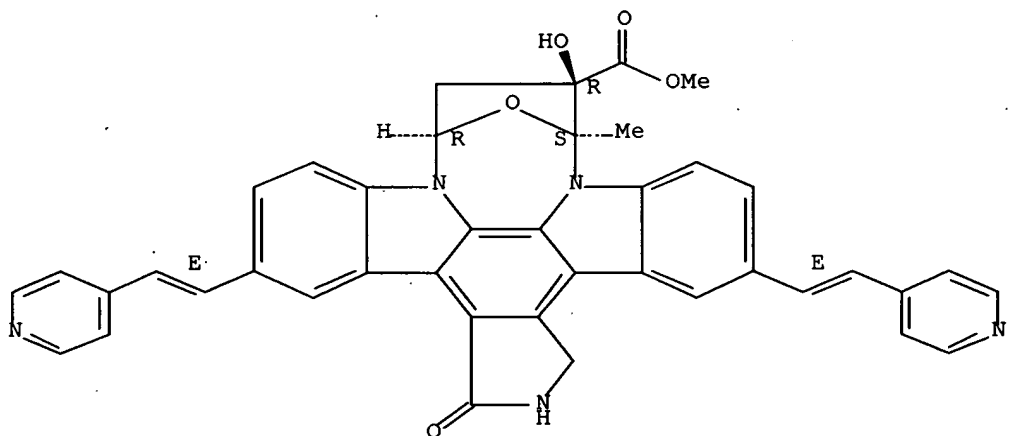


RN 200635-57-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(1E)-2-(4-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

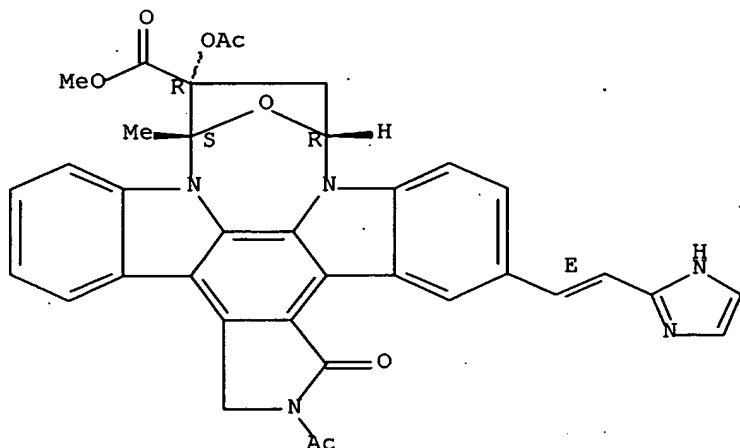


RN 200635-66-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-[(1E)-2-(1H-imidazol-2-yl)ethenyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

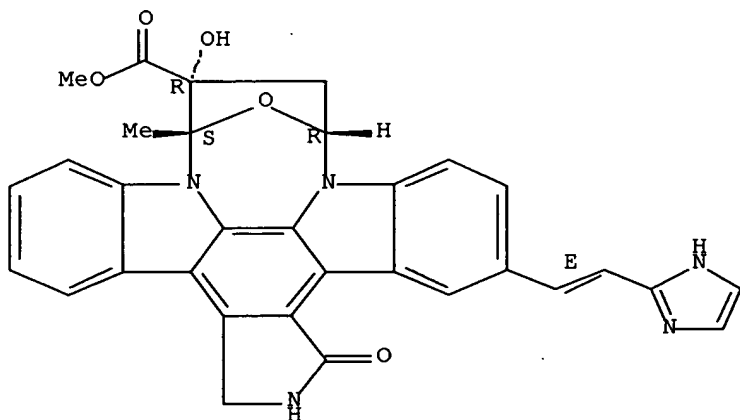


RN 200635-72-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-16-[(1E)-2-(1H-imidazol-2-yl)ethenyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

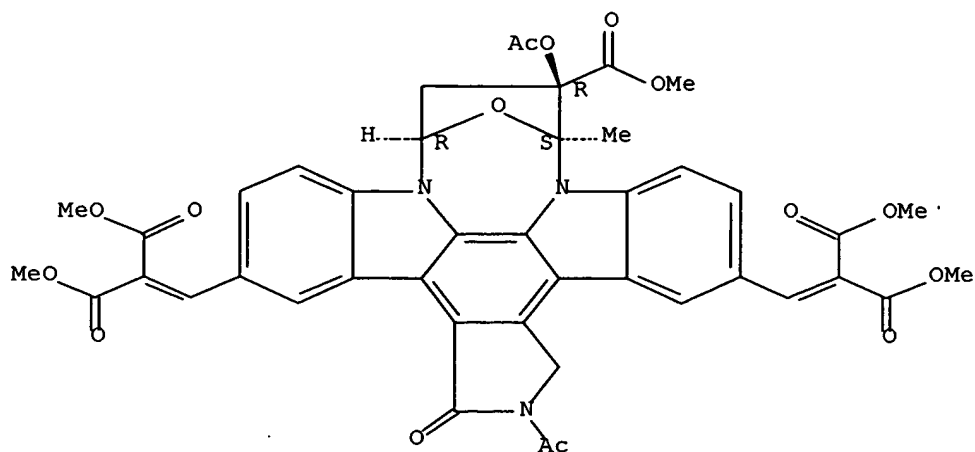
Double bond geometry as shown.



RN 200635-84-3 CAPLUS

CN Propanedioic acid, 2,2'-[[(9S,10R,12R)-2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-10-(methoxycarbonyl)-9-methyl-1-oxo-9,12-epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-5,16-diyl]dimethylidene]bis-, tetramethyl ester (9CI) (CA INDEX NAME)

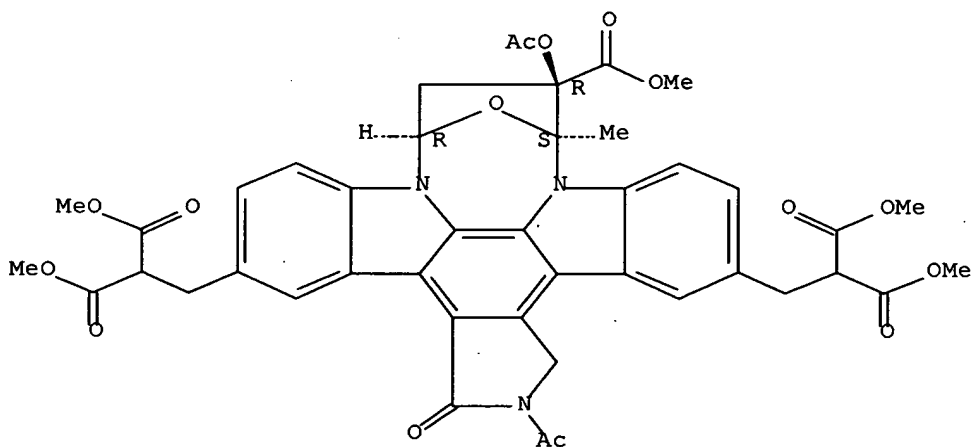
Absolute stereochemistry.



RN 200635-90-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-5,16-dipropanoic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-.alpha.,.alpha.',10-tris(methoxycarbonyl)-9-methyl-1-oxo-, dimethyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

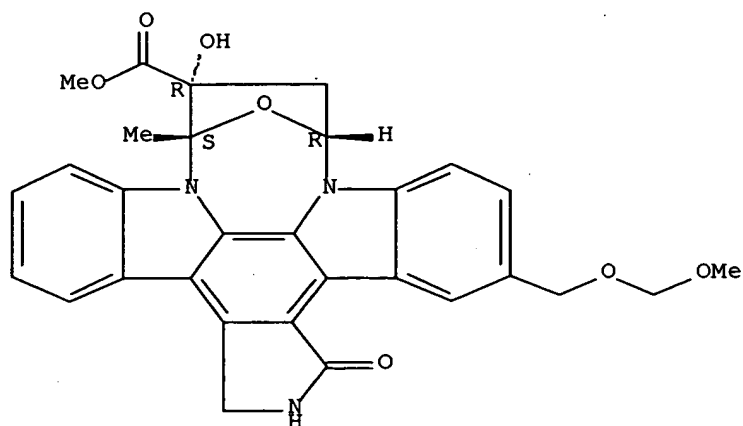
Absolute stereochemistry.



RN 200636-03-9 CAPLUS

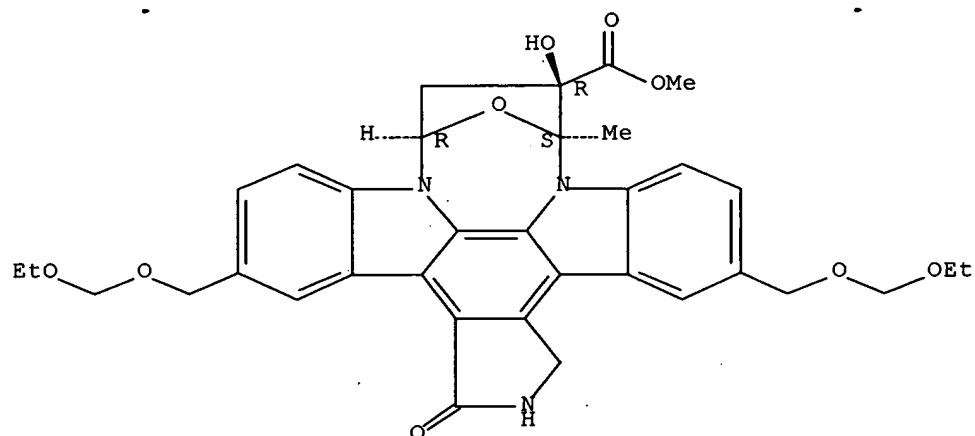
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-16-[(methoxymethoxy)methyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



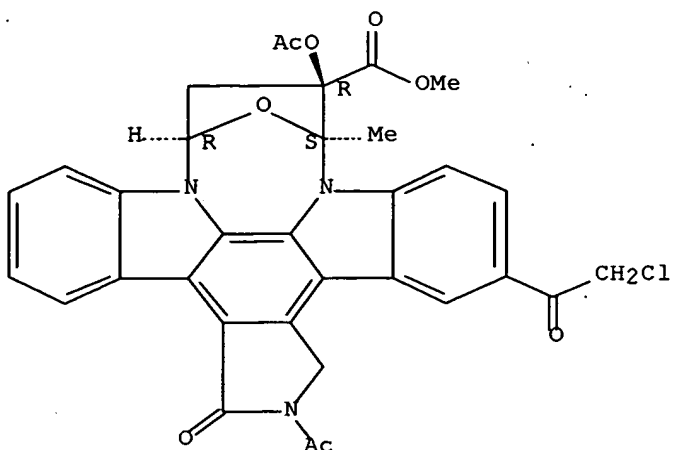
RN 200636-14-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethoxymethoxy)methyl]-
 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200637-36-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-(chloroacetyl)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

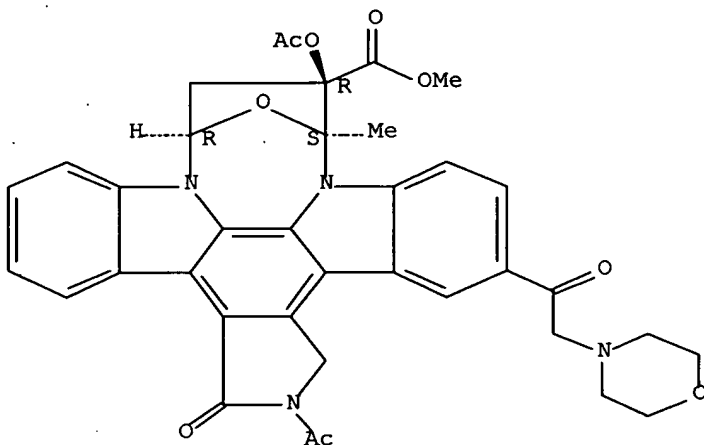
Absolute stereochemistry.



RN 200637-37-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-5-(4-morpholinylacetyl)-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

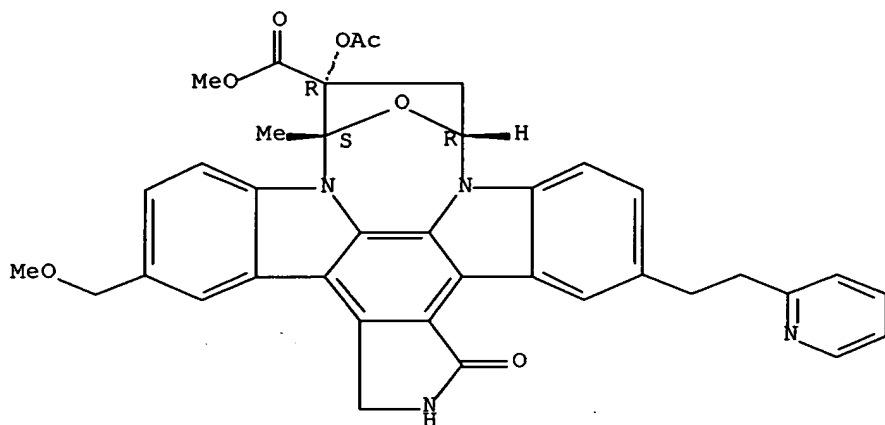
Absolute stereochemistry.



RN 200637-43-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5-(methoxymethyl)-9-methyl-1-oxo-16-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

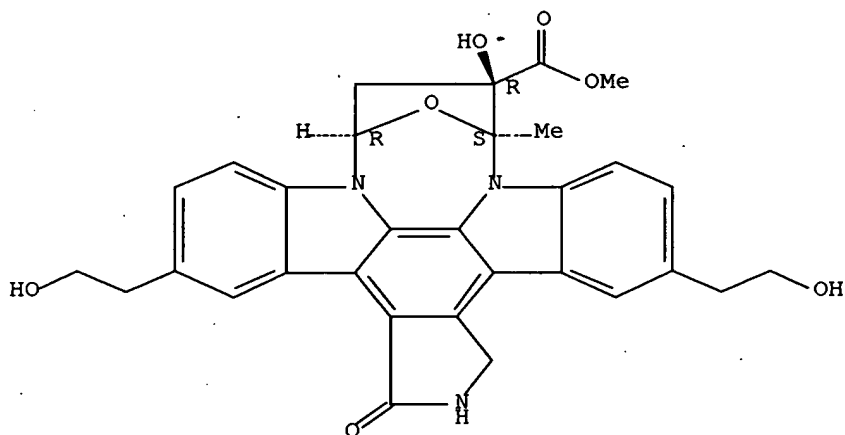
Absolute stereochemistry.



RN 200637-49-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(2-hydroxyethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 200632-37-7P 200632-39-9P 200632-42-4P
 200632-45-7P 200632-46-8P 200632-47-9P
 200632-49-1P 200632-51-5P 200632-53-7P
 200632-54-8P 200632-55-9P 200632-56-0P
 200632-58-2P 200632-60-6P 200632-63-9P
 200632-64-0P 200632-65-1P 200632-66-2P
 200632-67-3P 200632-69-5P 200632-70-8P
 200632-72-0P 200632-73-1P 200632-76-4P
 200632-77-5P 200632-80-0P 200632-81-1P
 200632-82-2P 200632-83-3P 200632-84-4P
 200632-86-6P 200632-87-7P 200632-89-9P
 200632-90-2P 200632-91-3P 200632-92-4P
 200632-93-5P 200632-94-6P 200632-95-7P
 200632-96-8P 200632-98-0P 200633-02-9P
 200633-06-3P 200633-10-9P 200633-16-5P

200633-18-7P 200633-24-5P 200633-26-7P
 200633-28-9P 200633-30-3P 200633-32-5P
 200633-34-7P 200633-36-9P 200633-38-1P
 200633-40-5P 200633-42-7P 200633-44-9P
 200633-46-1P 200633-48-3P 200633-50-7P
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 200633-79-0P 200633-81-4P 200633-83-6P
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 200635-01-4P 200635-07-0P 200635-13-8P
 200635-23-0P 200635-27-4P 200635-31-0P
 200635-35-4P 200635-50-3P 200635-62-7P
 200635-78-5P 200635-96-7P 200636-00-6P
 200636-09-5P 200636-21-1P 200637-38-3P
 200637-39-4P 200637-40-7P 200637-41-8P
 200637-42-9P 200637-44-1P 200637-45-2P

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses)

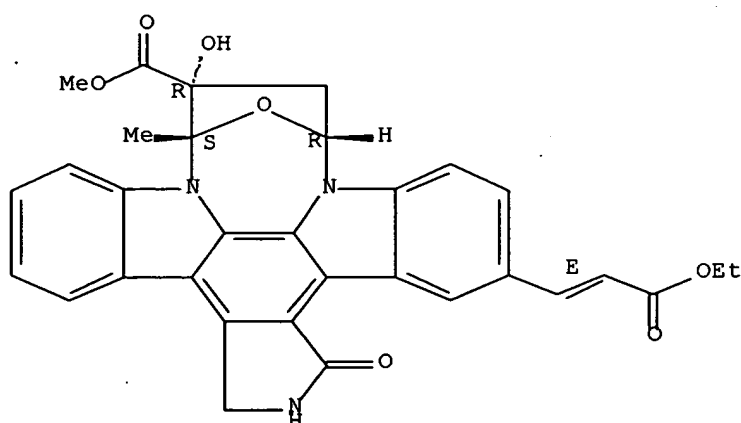
(synthesis and neurotropic activity of selected derivs. of K-252a)

RN 200632-37-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(1E)-3-ethoxy-3-oxo-1-propenyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

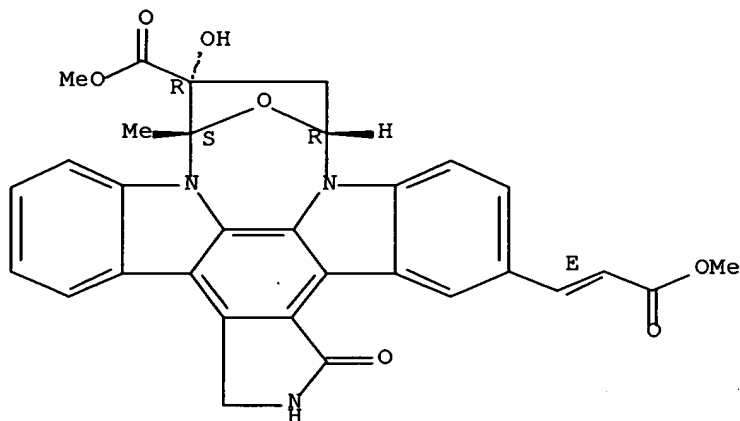


RN 200632-39-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-

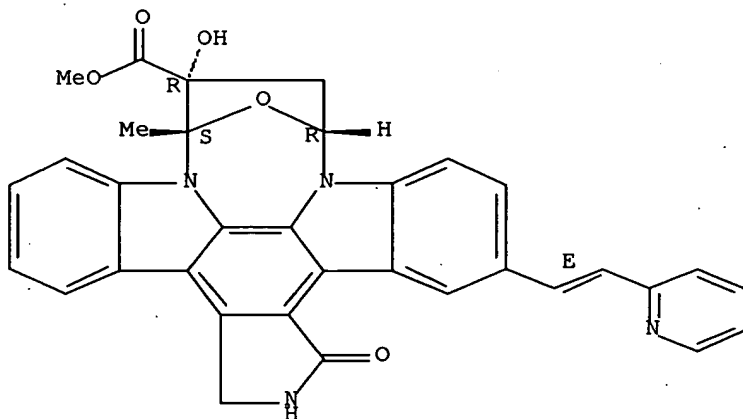
hydroxy-16-[(1E)-3-methoxy-3-oxo-1-propenyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



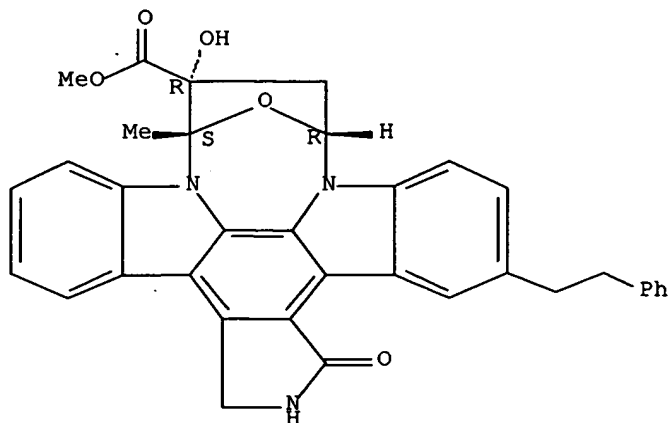
RN 200632-42-4 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 200632-45-7 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-(2-phenylethyl)-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

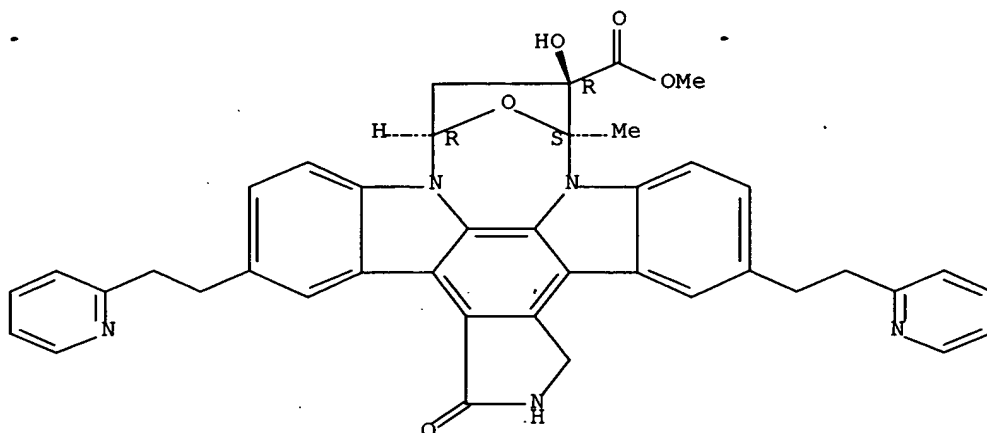
Absolute stereochemistry.



RN 200632-46-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

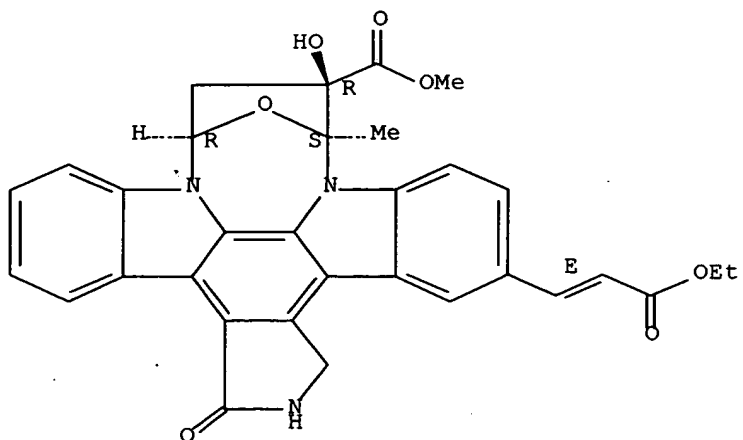


RN 200632-47-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[(1E)-3-ethoxy-3-oxo-1-propenyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

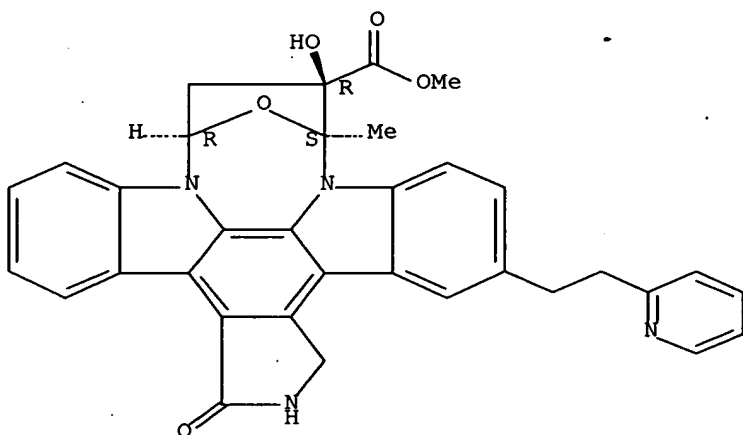
Double bond geometry as shown.



RN 200632-49-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

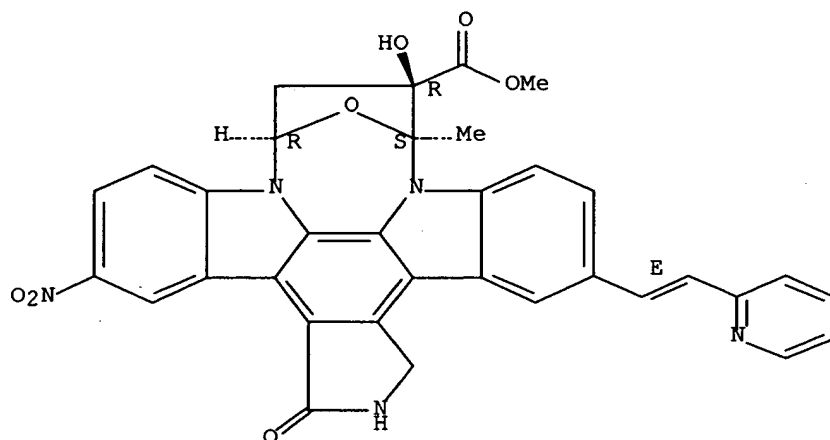


RN 200632-51-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-16-nitro-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

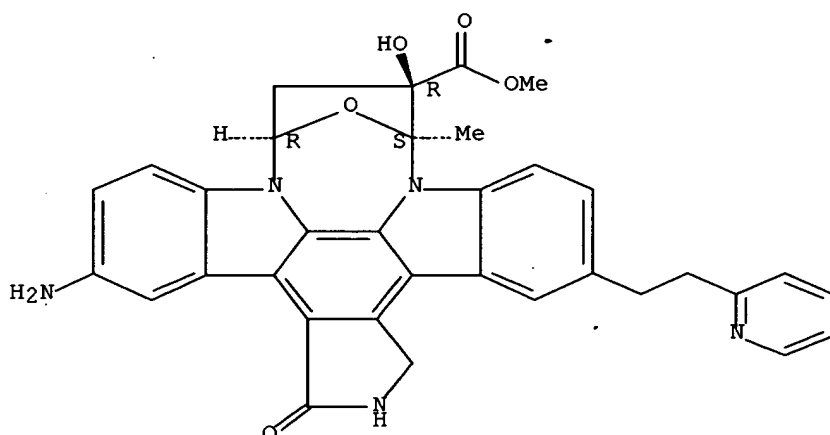
Double bond geometry as shown.



RN 200632-53-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-amino-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

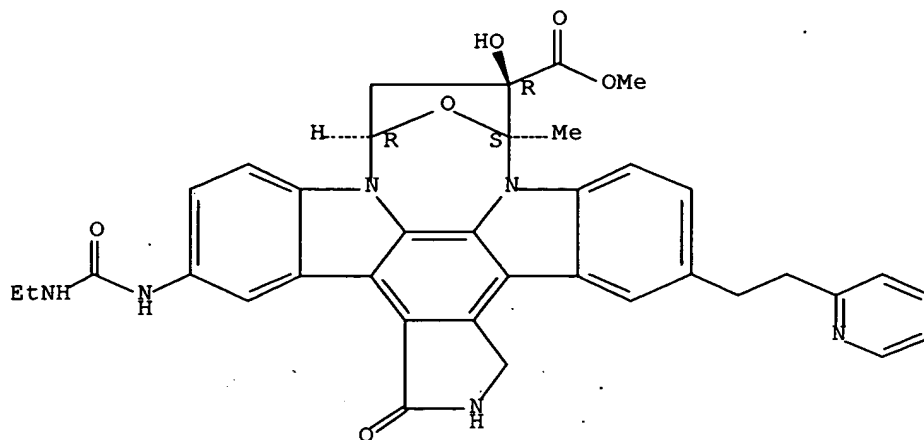
Absolute stereochemistry.



RN 200632-54-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[(ethylamino)carbonyl]amino]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

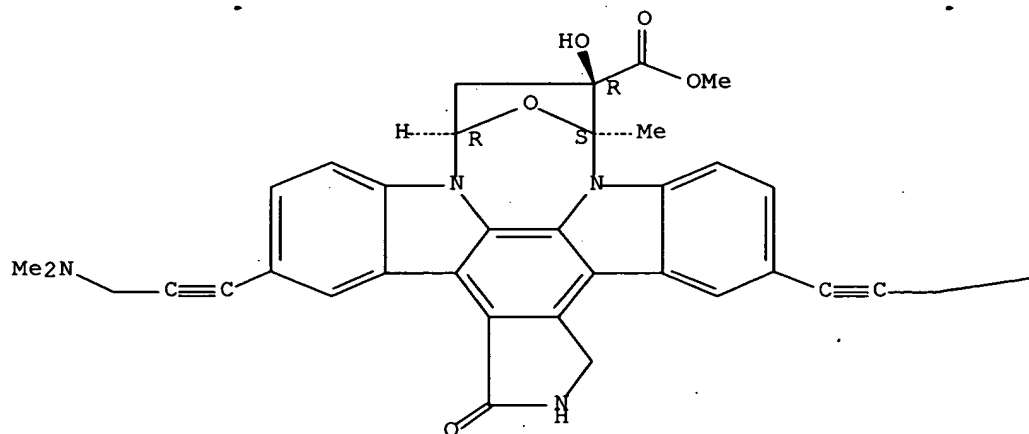
Absolute stereochemistry.



RN 200632-55-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[3-(dimethylamino)-1-propynyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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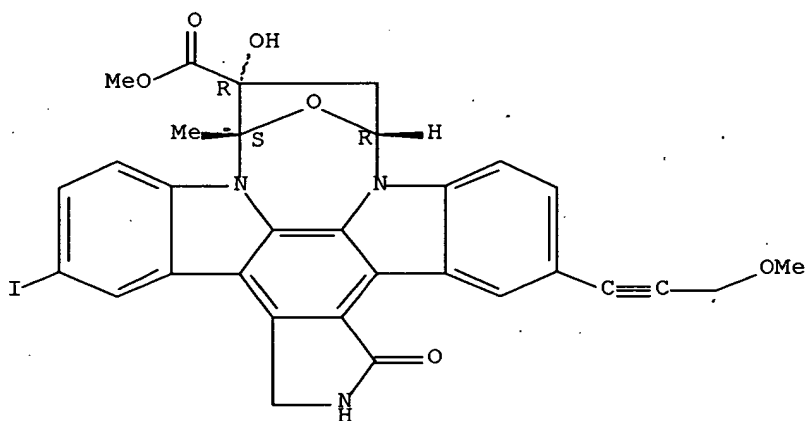


—NMe₂

RN 200632-56-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-5-iodo-10-hydroxy-16-(3-methoxy-1-propynyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

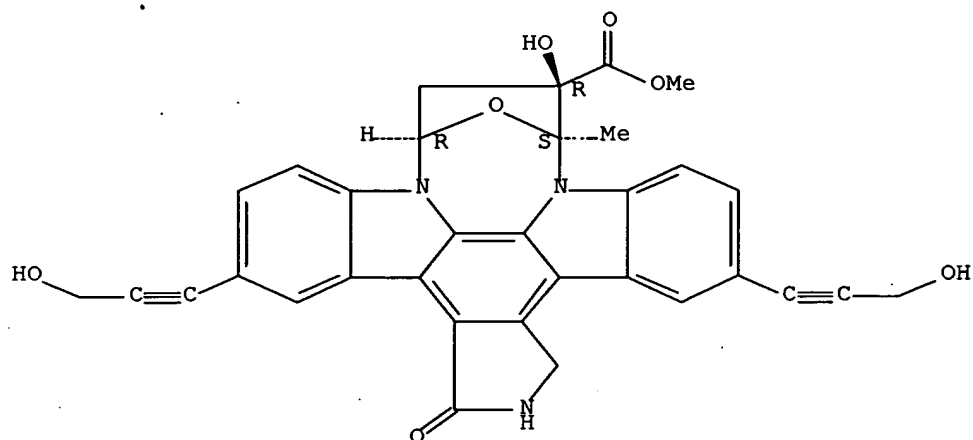
Absolute stereochemistry.



RN 200632-58-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(3-hydroxy-1-propynyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

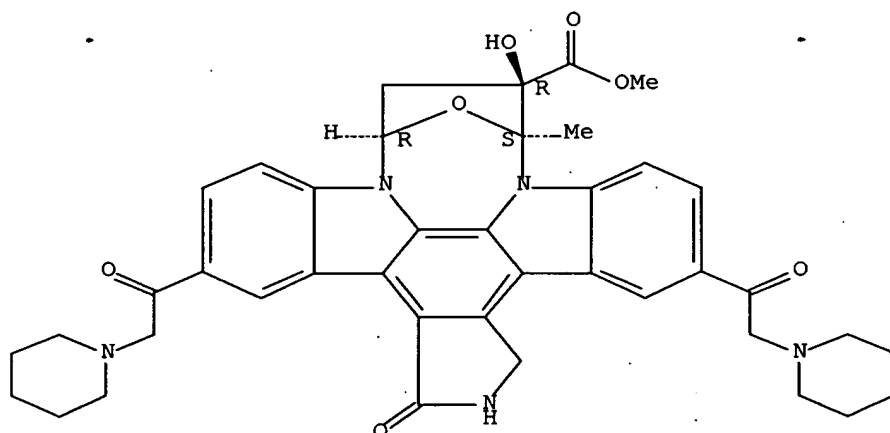
Absolute stereochemistry.



RN 200632-60-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis(1-piperidinylacetyl)-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

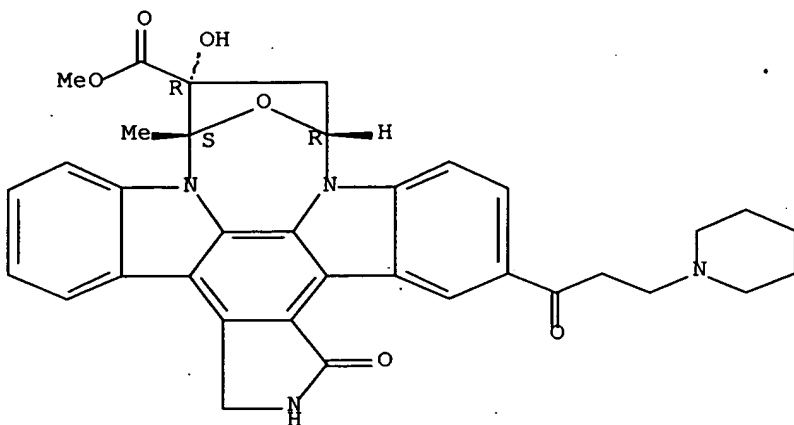
Absolute stereochemistry.



RN 200632-63-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[1-oxo-3-(1-piperidinyl)propyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

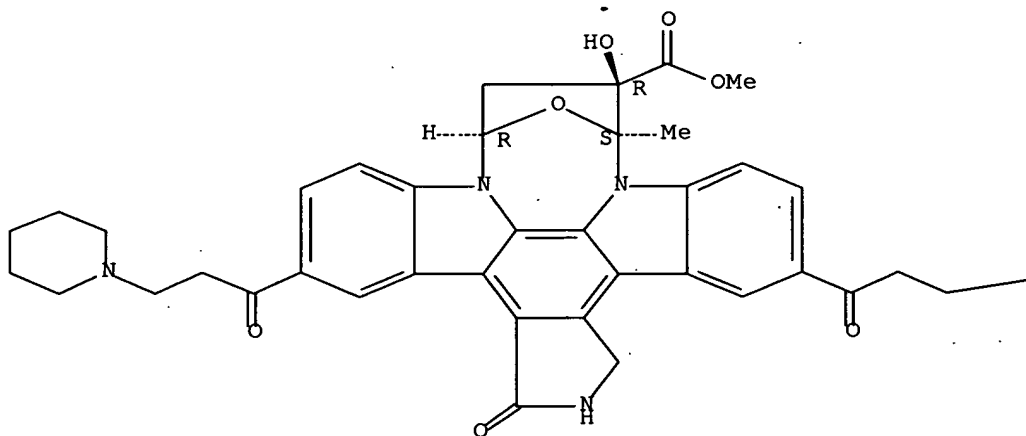


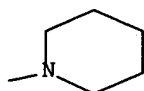
RN 200632-64-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[1-oxo-3-(1-piperidinyl)propyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



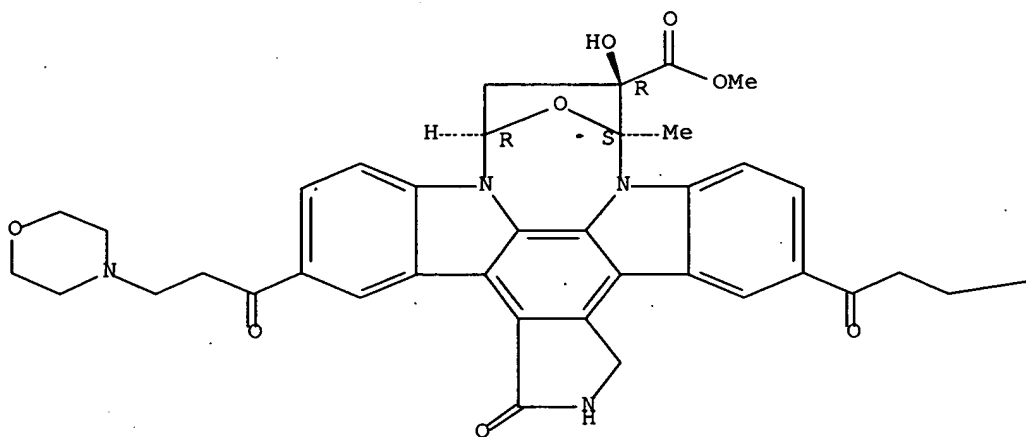


RN 200632-65-1 CAPLUS

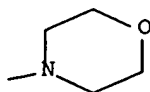
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[3-(4-morpholinyl)-1-oxopropyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

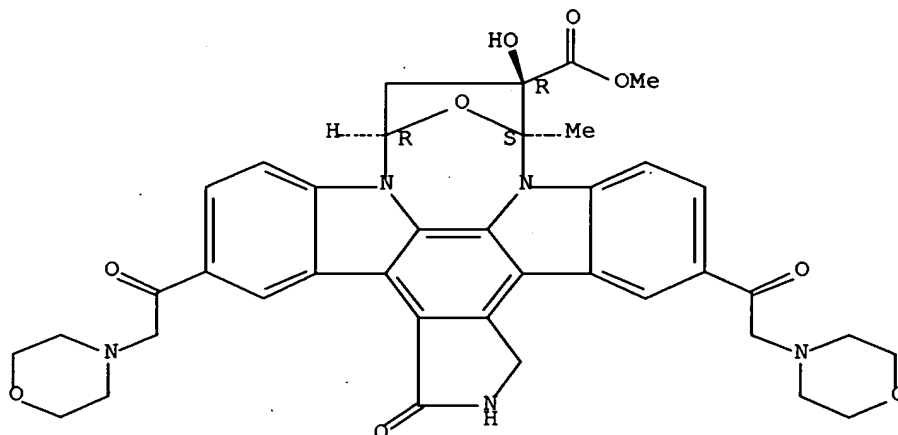


RN 200632-66-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-

i) [1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis(4-morpholinylacetyl)-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



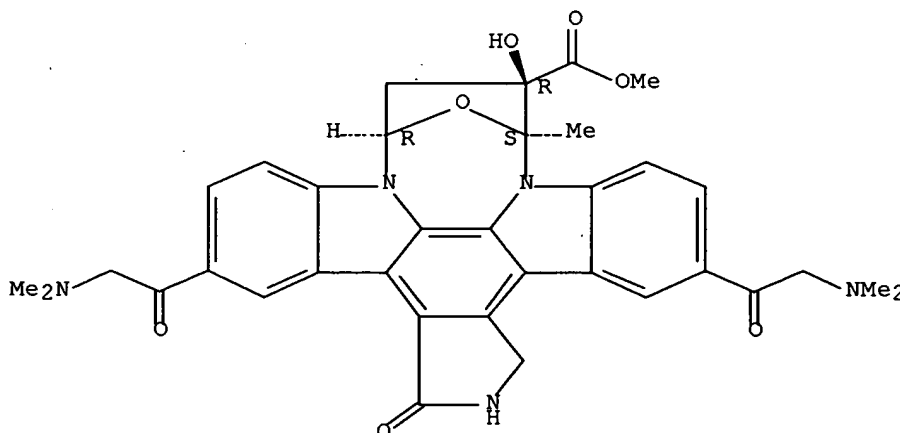
RN 200632-67-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i]

[1,6]benzodiazocine-10-carboxylic acid, 5,16-

bis[(dimethylamino)acetyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

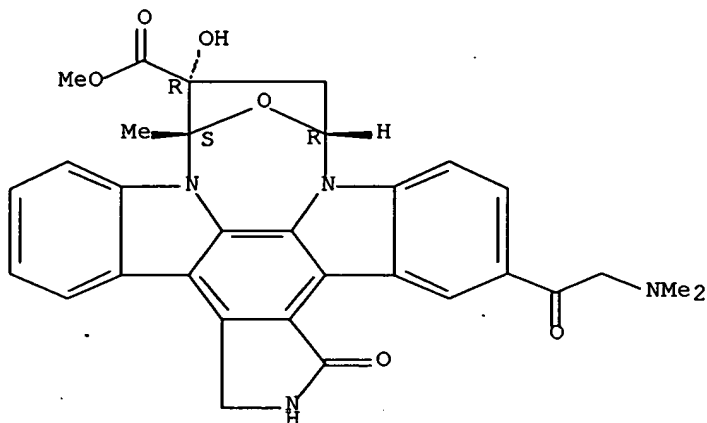


RN 200632-69-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i]

[1,6]benzodiazocine-10-carboxylic acid, 16-[(dimethylamino)acetyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

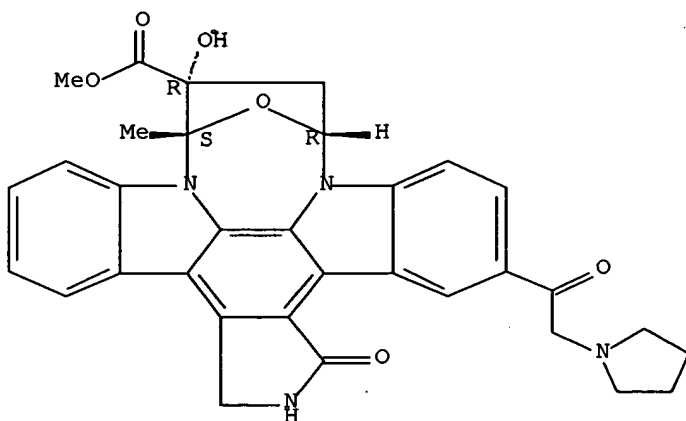
Absolute stereochemistry.



RN 200632-70-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-(1-pyrrolidinylacetyl)-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

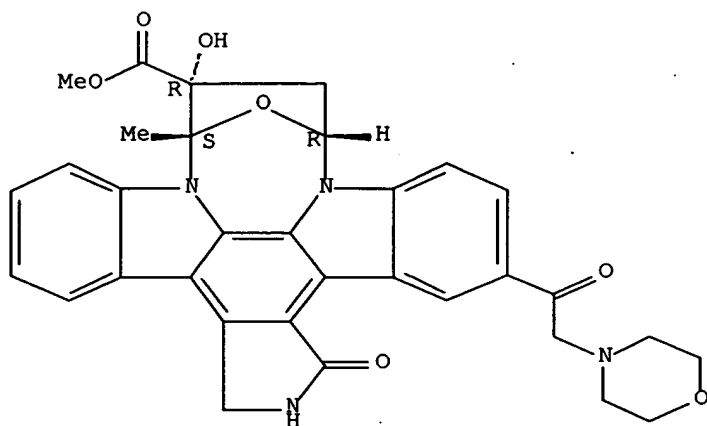
Absolute stereochemistry.



RN 200632-72-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-16-(4-morpholinylacetyl)-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

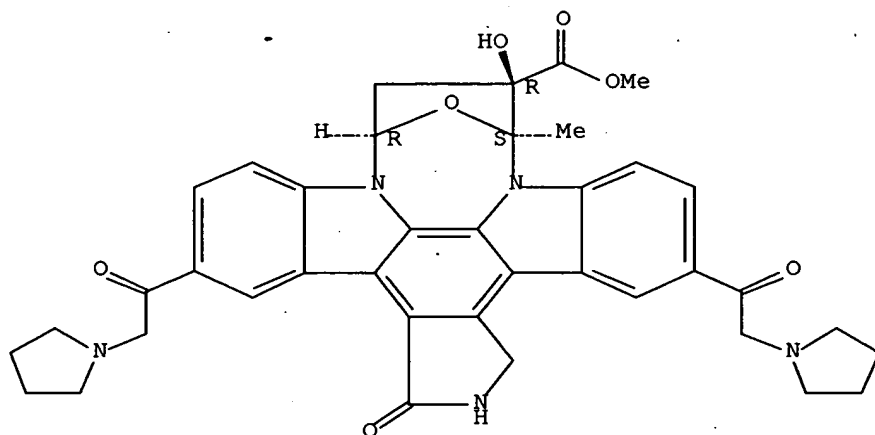
Absolute stereochemistry.



RN 200632-73-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis(1-pyrrolidinylacetyl)-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

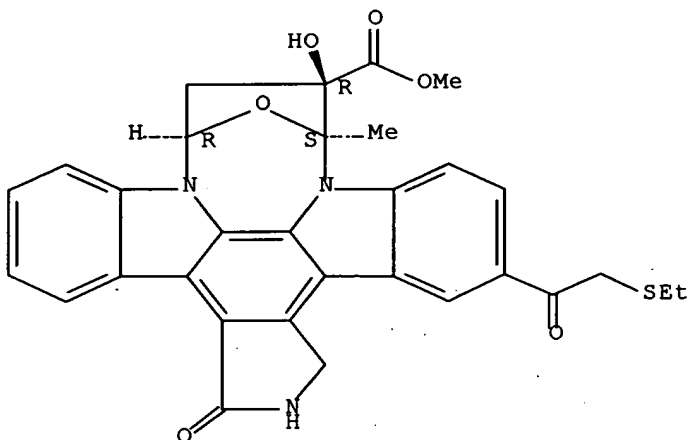
Absolute stereochemistry.



RN 200632-76-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[(ethylthio)acetyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

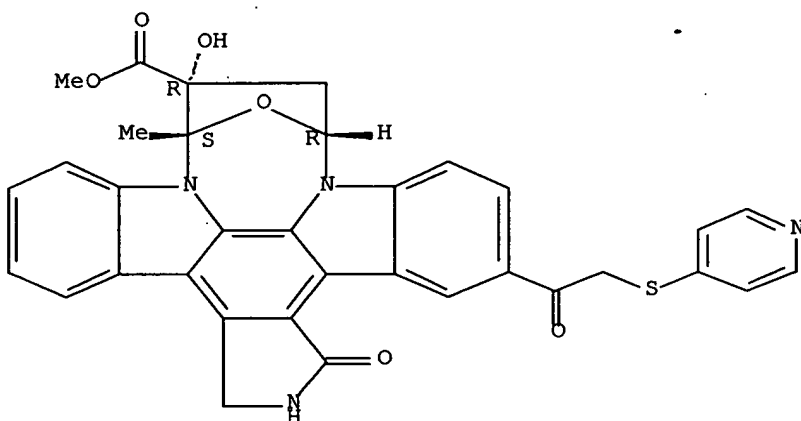
Absolute stereochemistry.



RN 200632-77-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(4-pyridinylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

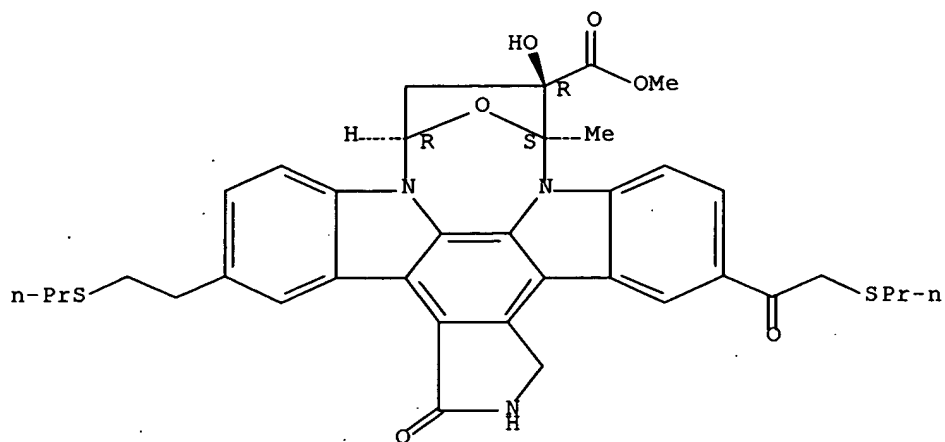
Absolute stereochemistry.



RN 200632-80-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(propylthio)acetyl]-16-[2-(propylthio)ethyl]-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

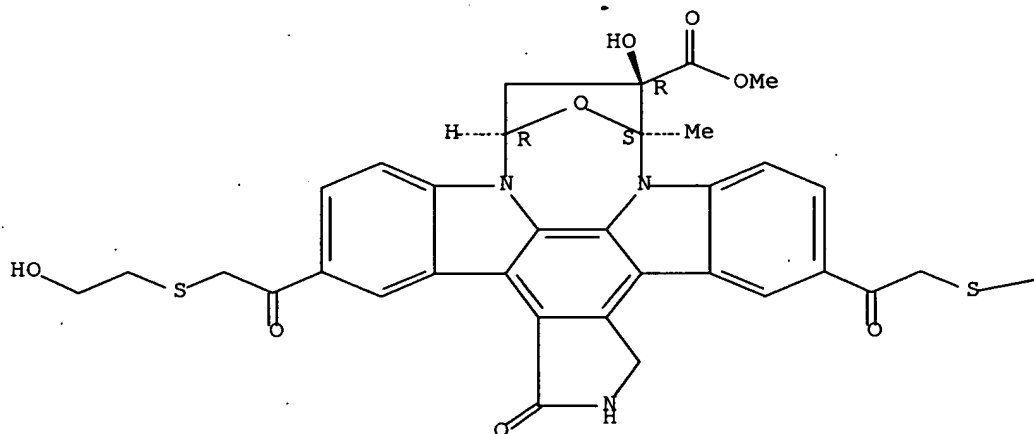


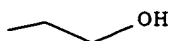
RN 200632-81-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis[[(2-hydroxyethyl)thio]acetyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

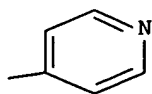
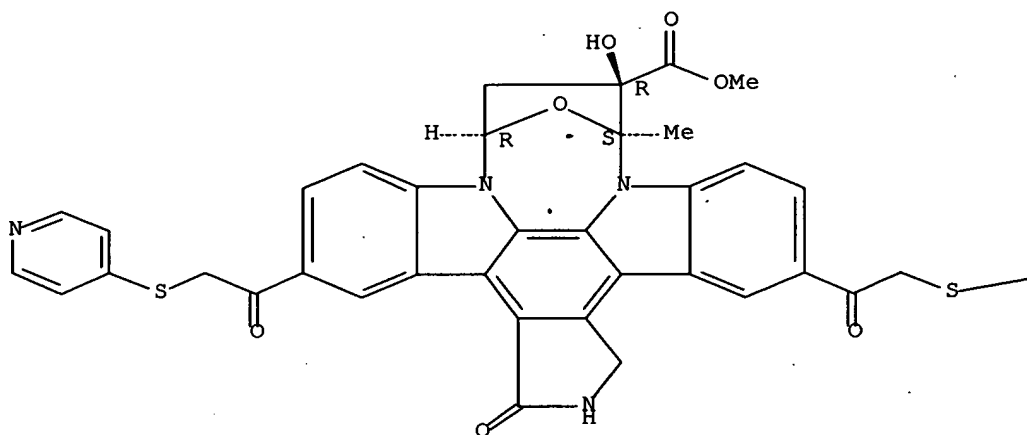
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RN 200632-82-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(4-pyridinylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

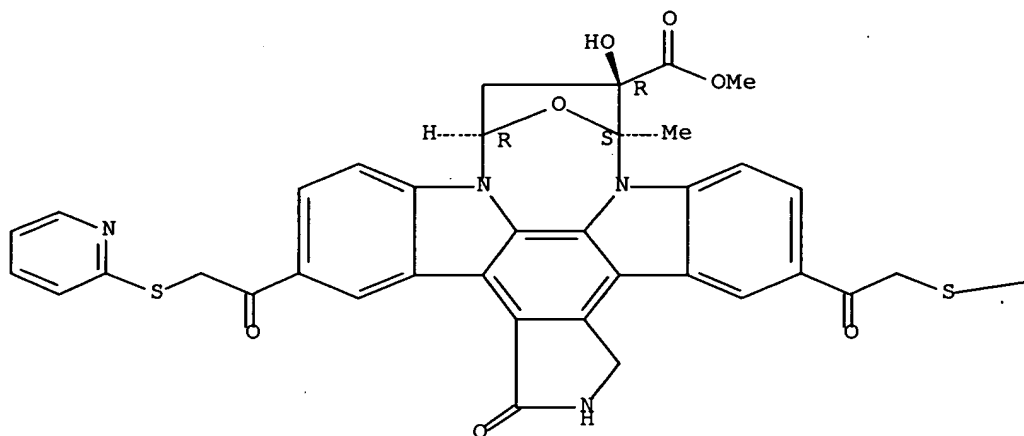


RN 200632-83-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-

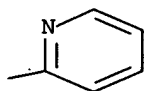
i)[1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(2-pyridinylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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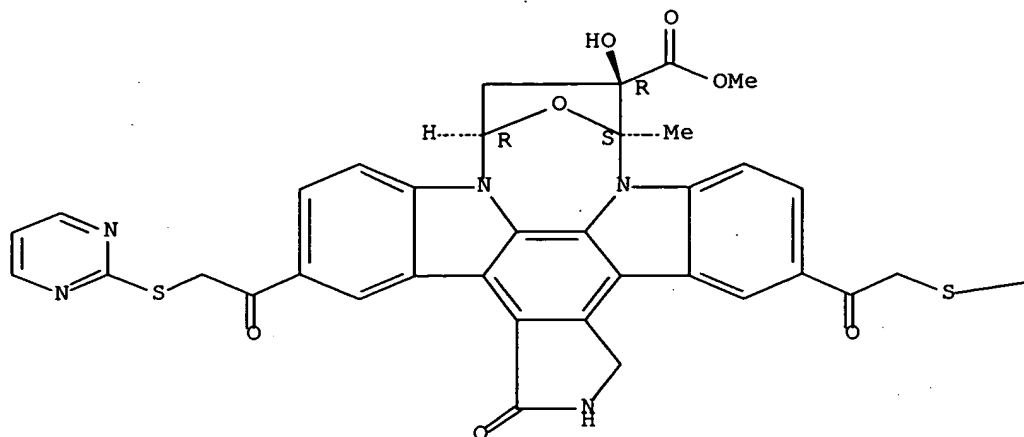


RN 200632-84-4 CAPLUS

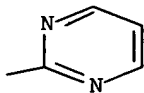
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(2-pyrimidinylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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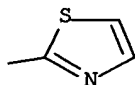
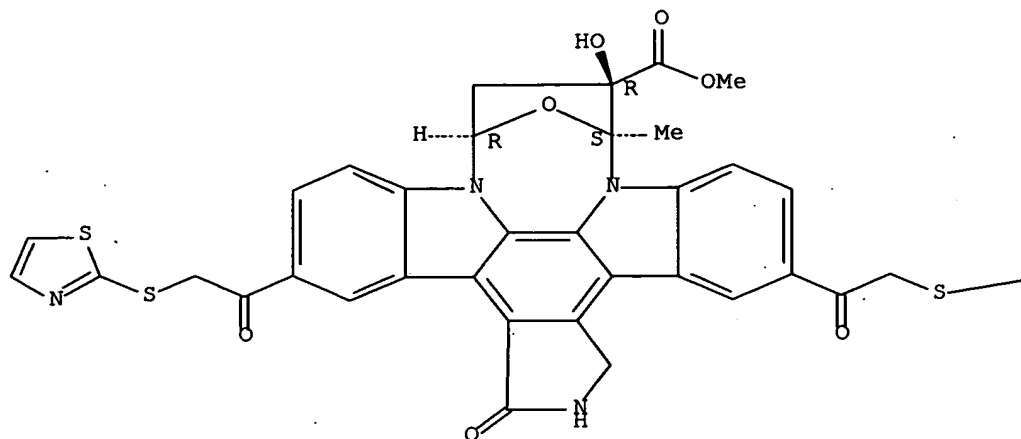


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RN 200632-86-6 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(2-thiazolylthio)acetyl]-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

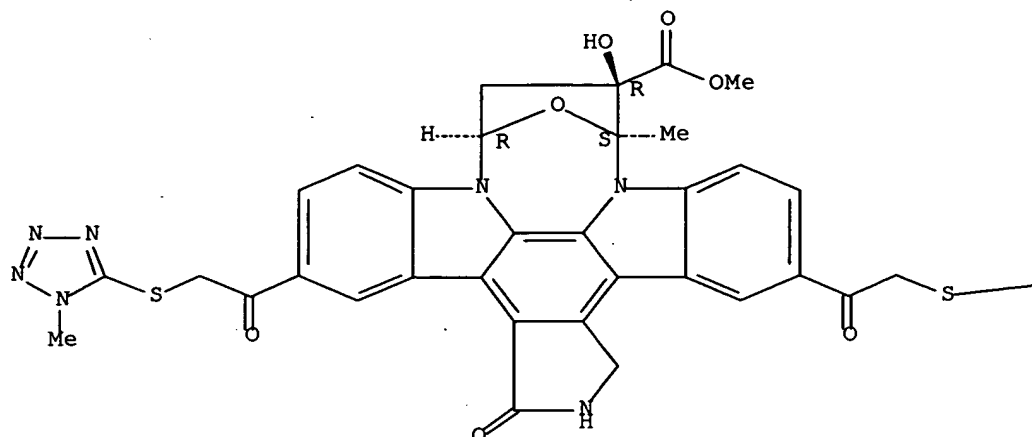
Absolute stereochemistry.



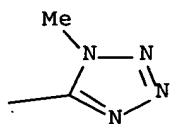
RN 200632-87-7 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[[(1-methyl-1H-tetrazol-5-yl)thio]acetyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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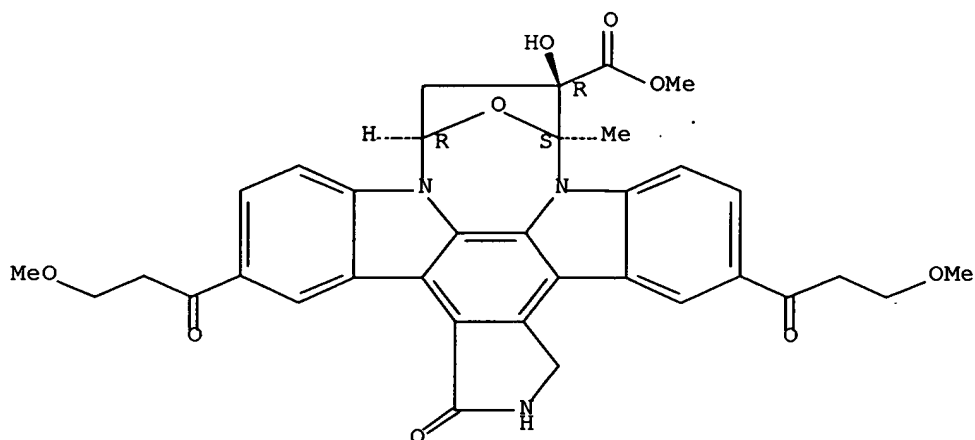


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RN 200632-89-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(3-methoxy-1-oxopropyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

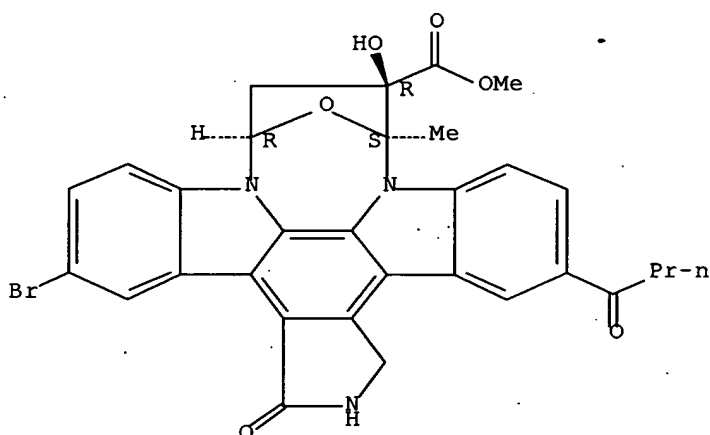
Absolute stereochemistry.



RN 200632-90-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-bromo-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-(1-oxobutyl)-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

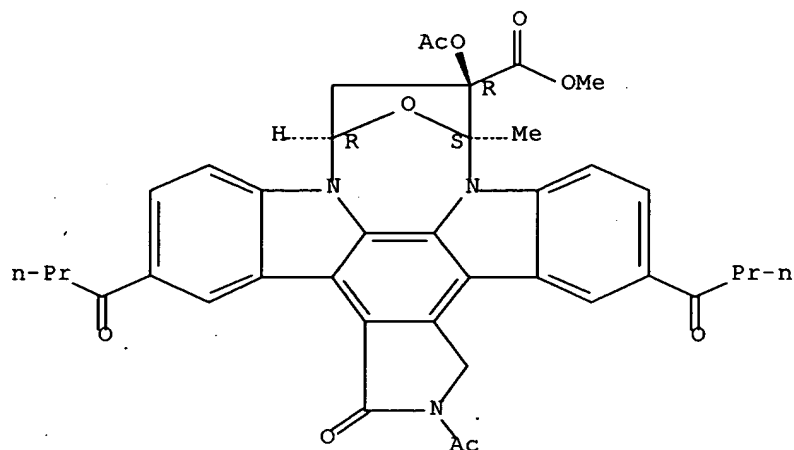
Absolute stereochemistry.



RN 200632-91-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5,16-bis(1-oxobutyl)-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

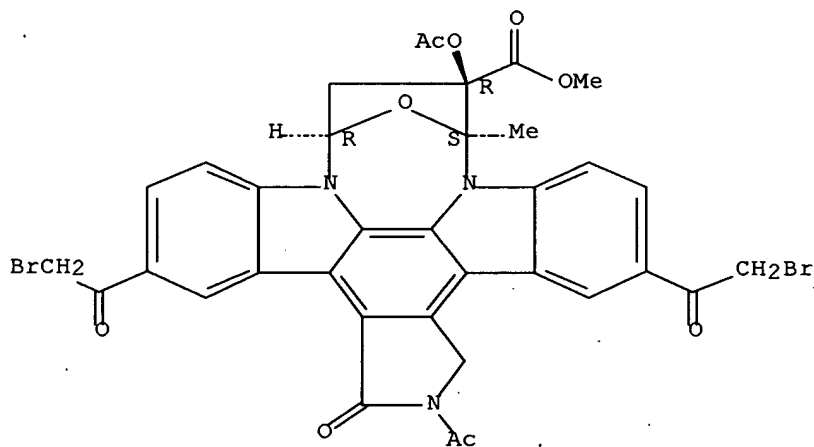
Absolute stereochemistry.



RN 200632-92-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis(bromoacetyl)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

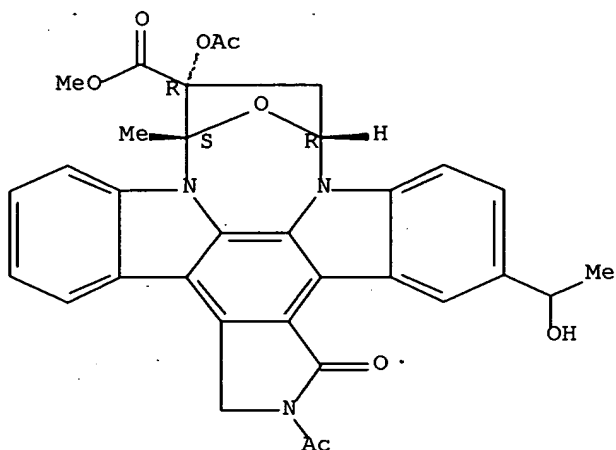
Absolute stereochemistry.



RN 200632-93-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-(1-hydroxyethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

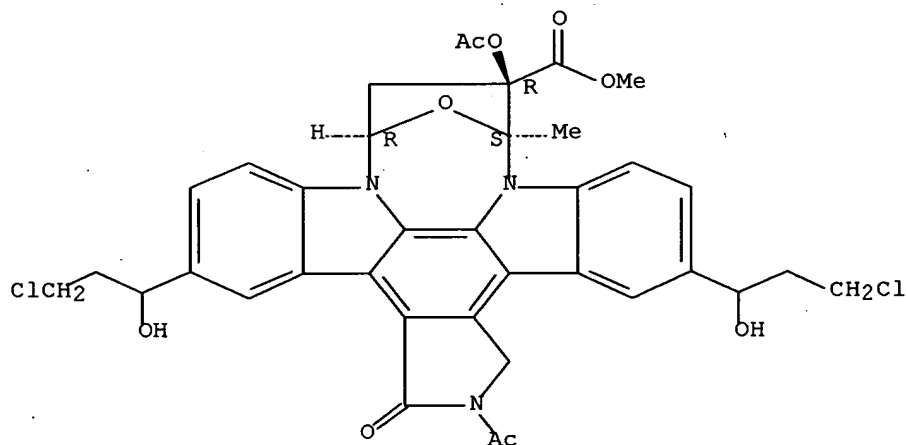
Absolute stereochemistry.



RN 200632-94-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis(3-chloro-1-hydroxypropyl)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]-[partial]- (9CI) (CA INDEX NAME)

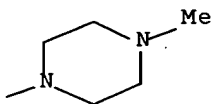
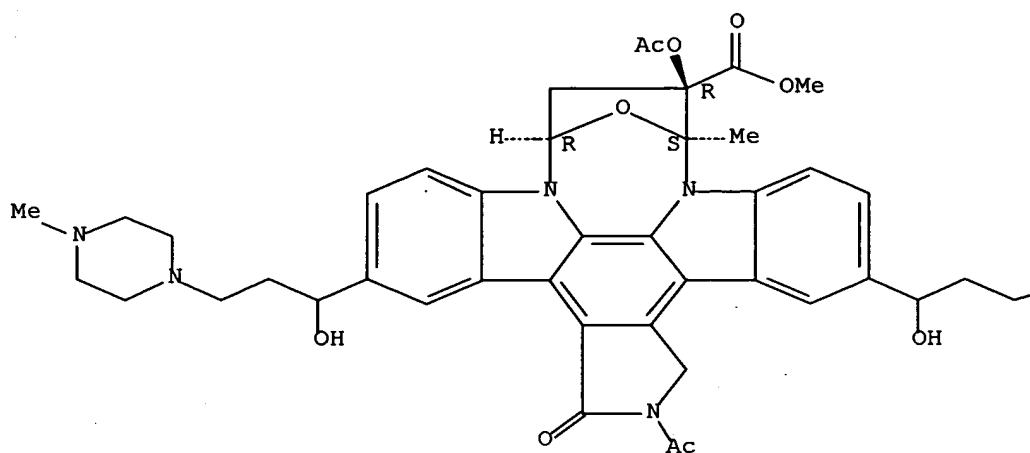
Absolute stereochemistry.



RN 200632-95-7 CAPLUS

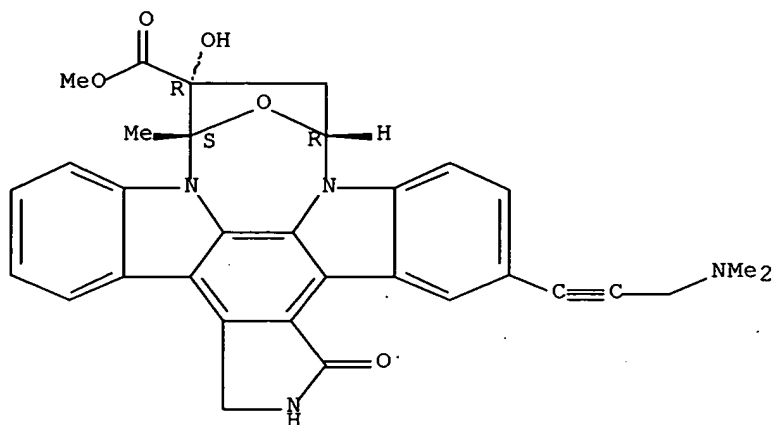
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5,16-bis[1-hydroxy-3-(4-methyl-1-piperazinyl)propyl]-9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200632-96-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[3-(dimethylamino)-1-propynyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

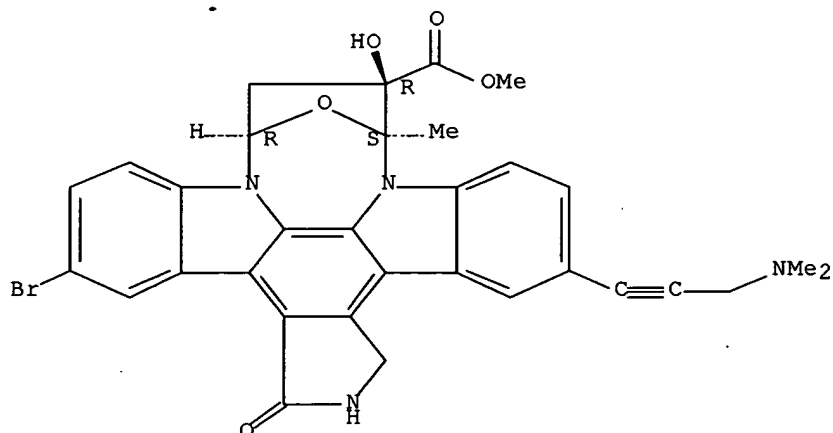
Absolute stereochemistry.



RN 200632-98-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-bromo-5-[3-(dimethylamino)-1-propynyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

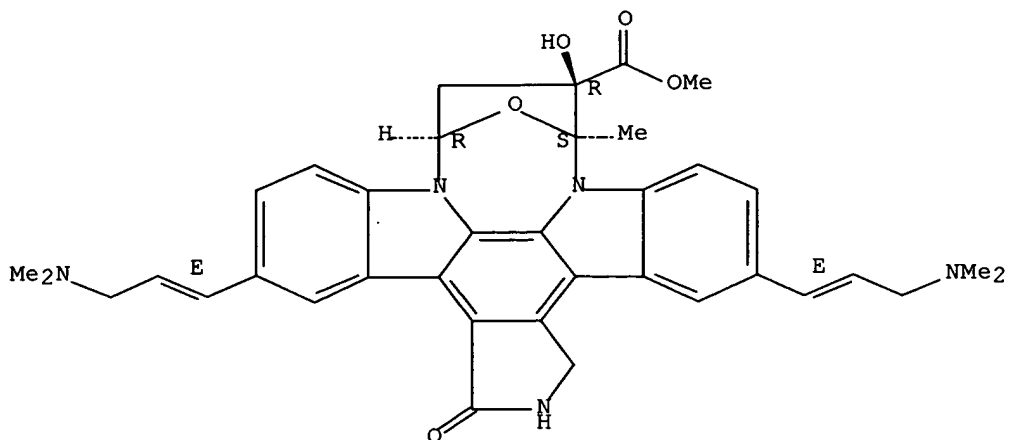


RN 200633-02-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[3-(dimethylamino)-1-propenyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, [9S-[5(E),9.alpha.,10.beta.,12.alpha.,16(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

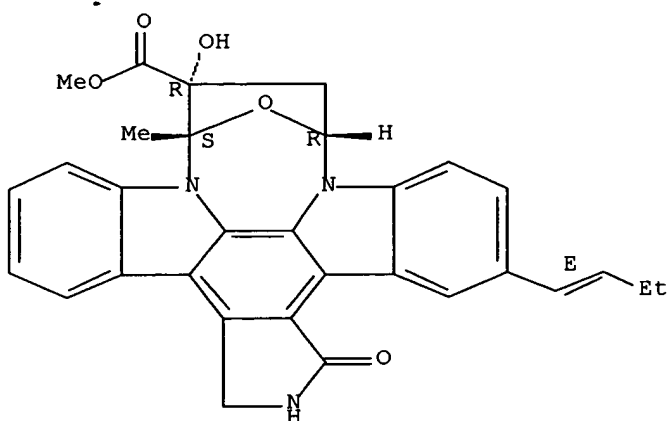


RN 200633-06-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-(1-butenyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, [9S-[9.alpha.,10.beta.,12.alpha.,16(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

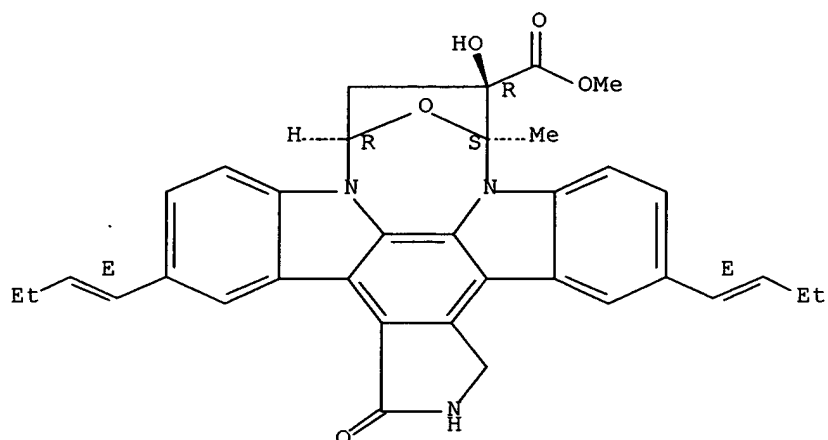


RN 200633-10-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis(1-butenyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, [9S-[5(E),9.alpha.,10.beta.,12.alpha.,16(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

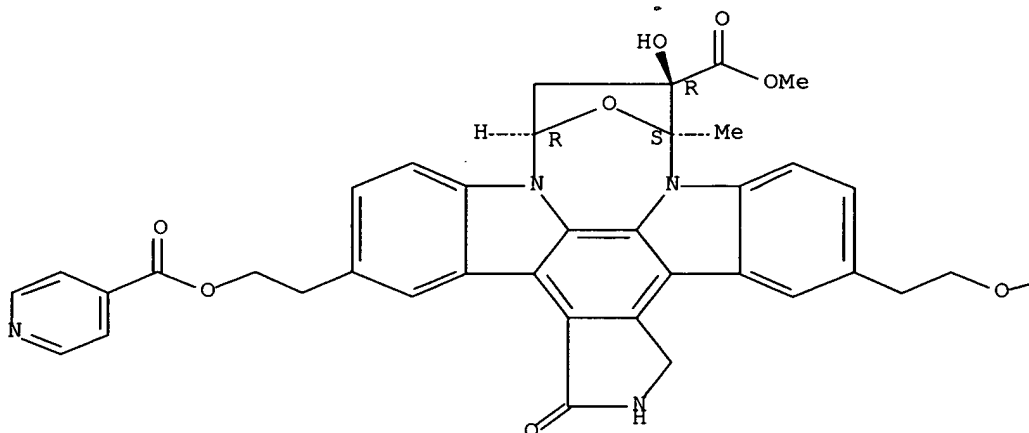
Double bond geometry as shown.

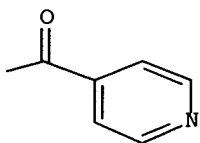


RN 200633-16-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[2-[(4-pyridinylcarbonyl)oxy]ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

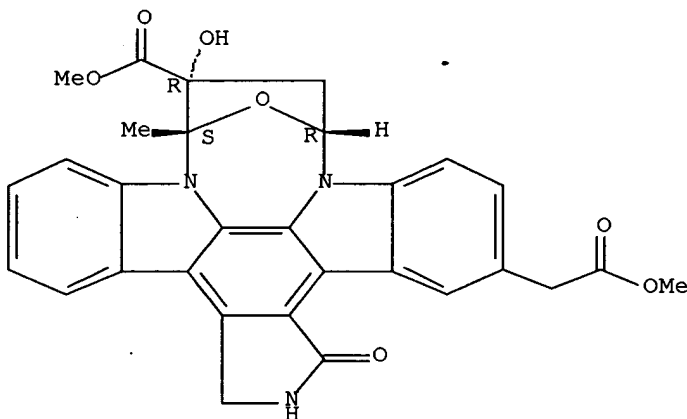
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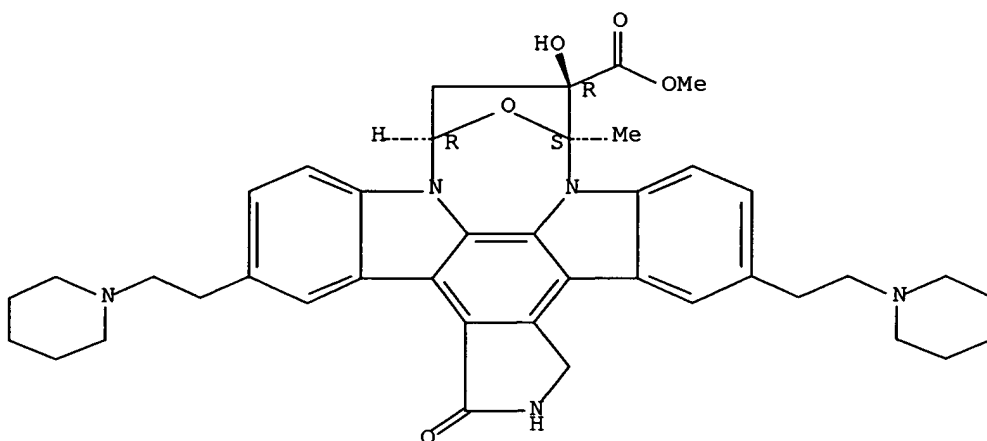
RN 200633-18-7 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-5-acetic acid, 2,3,9,10,11,12-hexahydro-11-hydroxy-11-(methoxycarbonyl)-12-methyl-3-oxo-, methyl ester, (9R,11R,12S)- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.



RN 200633-24-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[2-(1-piperidinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

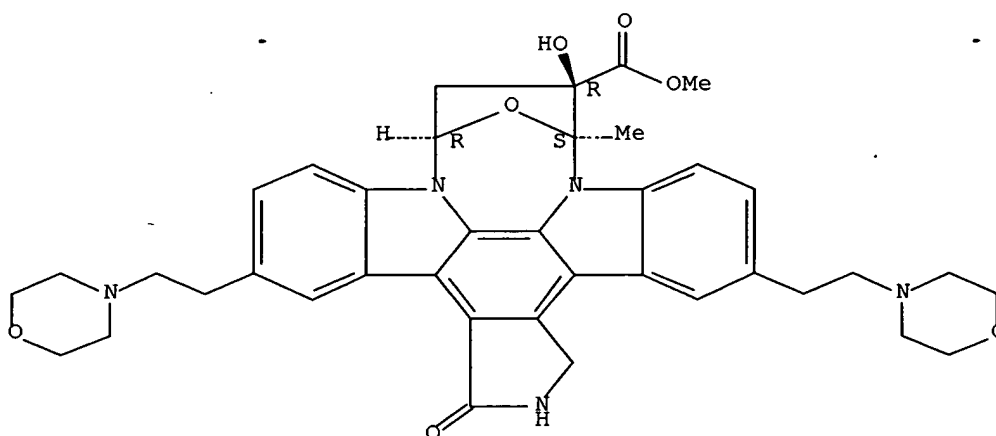
Absolute stereochemistry.



RN 200633-26-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[2-(4-morpholinyl)ethyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

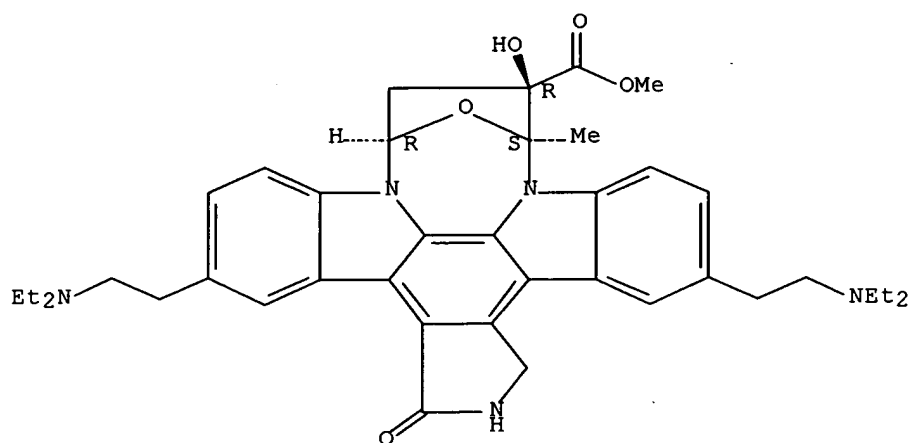
Absolute stereochemistry.



RN 200633-28-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[2-(dimethylamino)ethyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

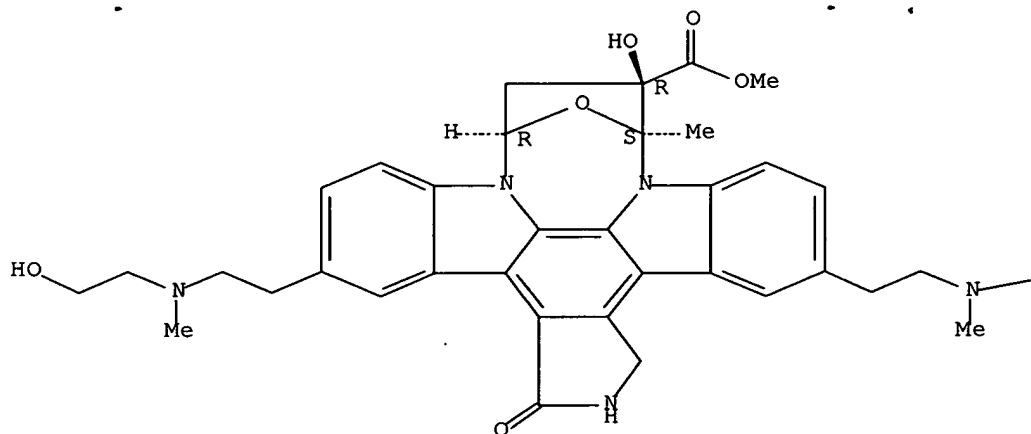


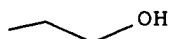
RN 200633-30-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis[2-[(2-hydroxyethyl)methylamino]ethyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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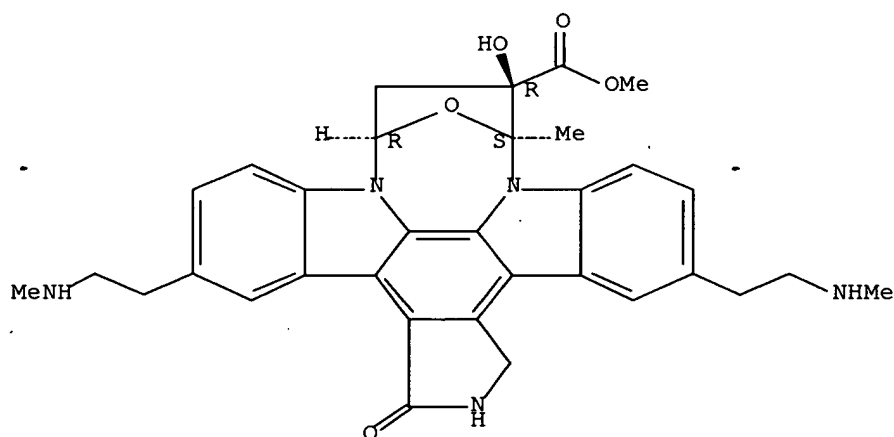




RN 200633-32-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[2-(methylamino)ethyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

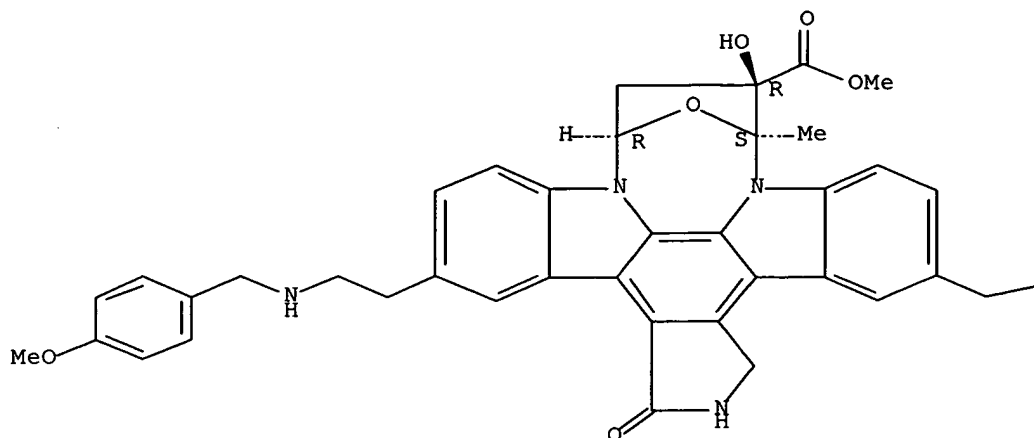


RN 200633-34-7 CAPLUS

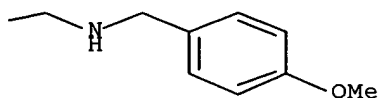
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis[2-[(4-methoxyphenyl)methyl]amino]ethyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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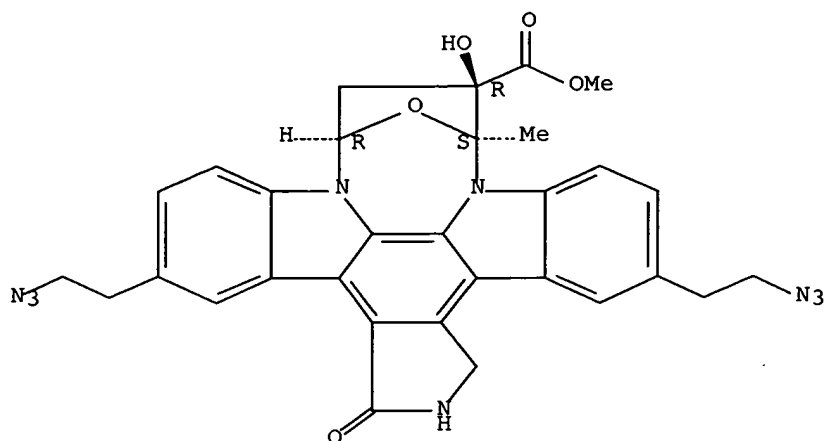


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RN 200633-36-9 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis(2-azidoethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

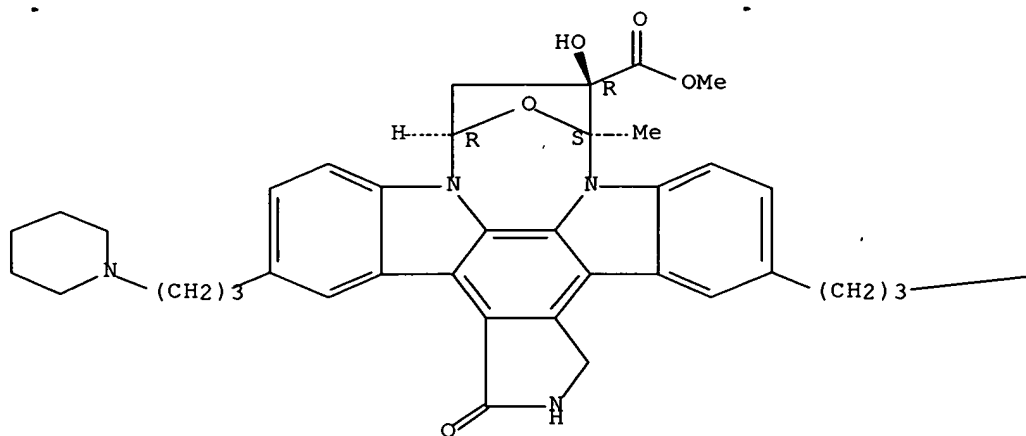


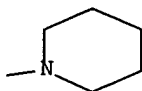
RN 200633-38-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[3-(1-piperidinyl)propyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

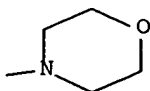
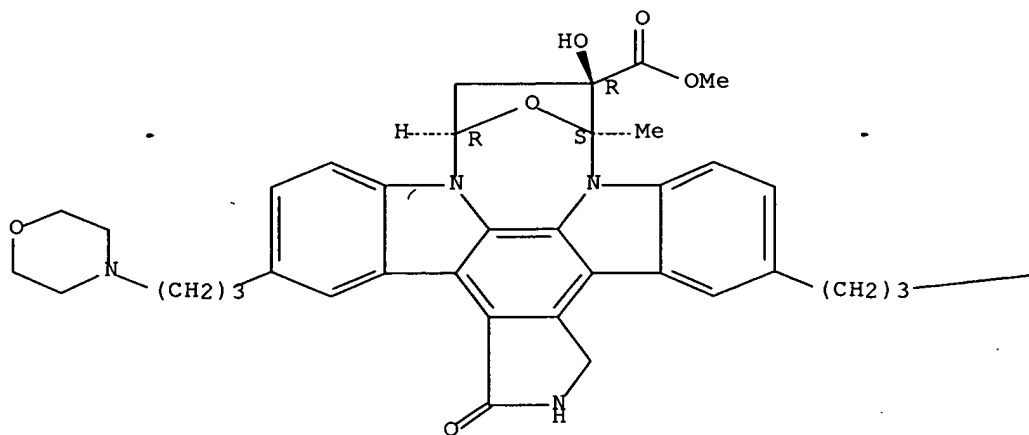
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RN 200633-40-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[3-(4-morpholinyl)propyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

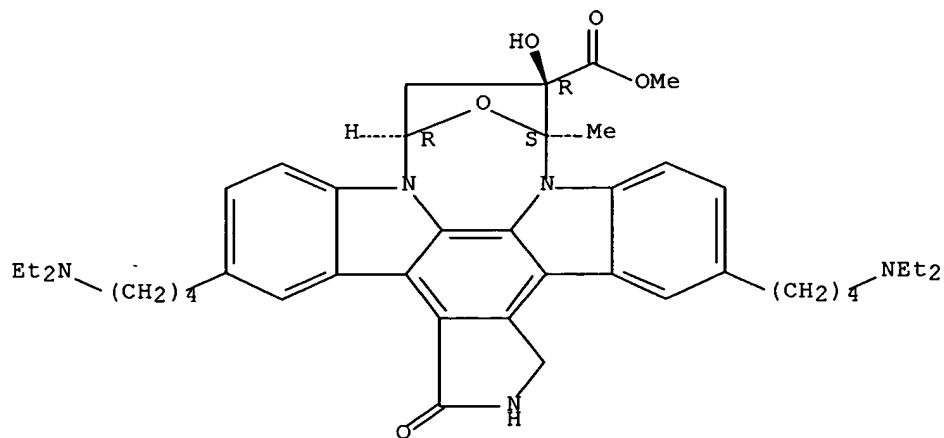
Absolute stereochemistry.



RN 200633-42-7 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-

i)[1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[4-(diethylamino)butyl]-
2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
[9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

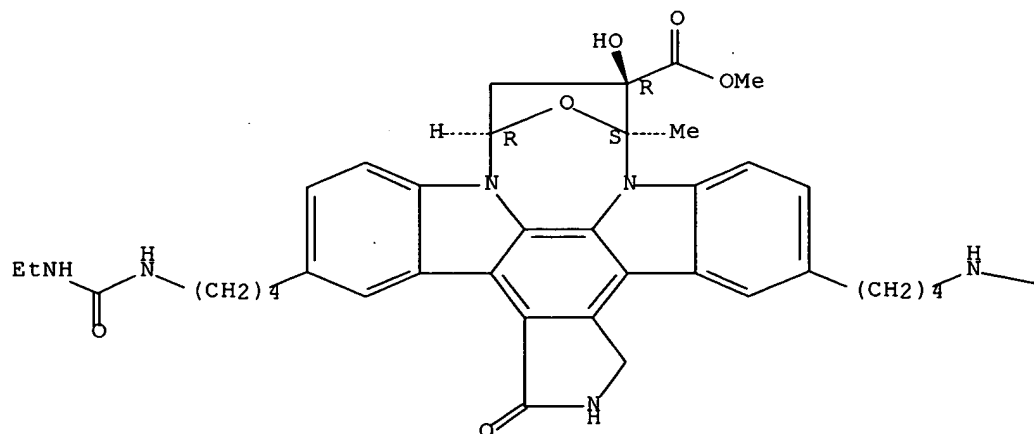


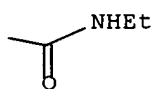
RN 200633-44-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[4-
[[(ethylamino)carbonyl]amino]butyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-
9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

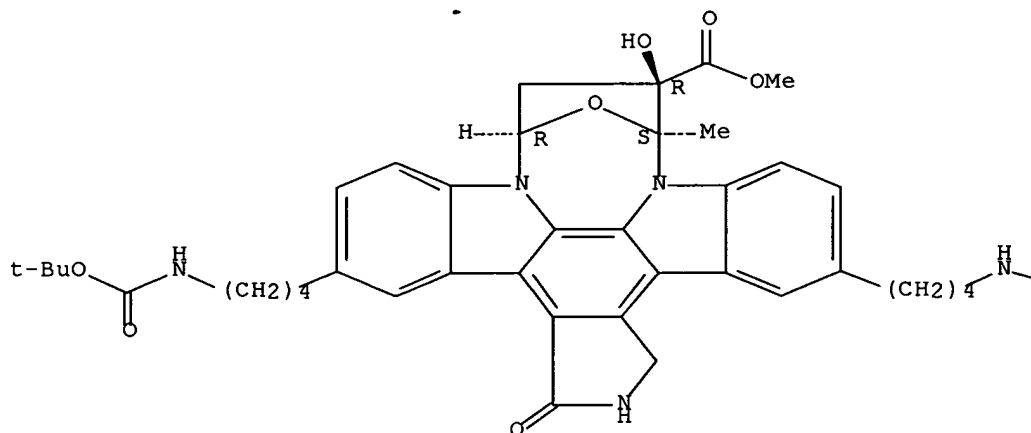
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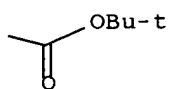




RN 200633-46-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[4-[(1,1-dimethylethoxy)carbonyl]amino]butyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI)
 (CA INDEX NAME)

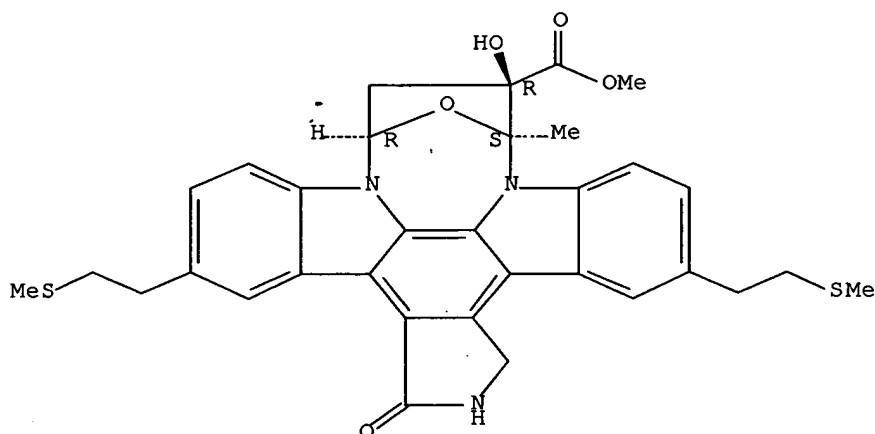
Absolute stereochemistry.





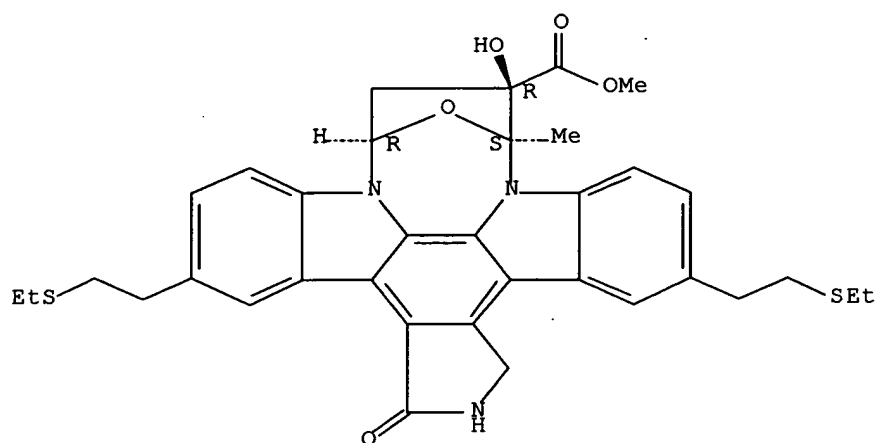
RN 200633-48-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[2-(methylthio)ethyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200633-50-7 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[2-(ethylthio)ethyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

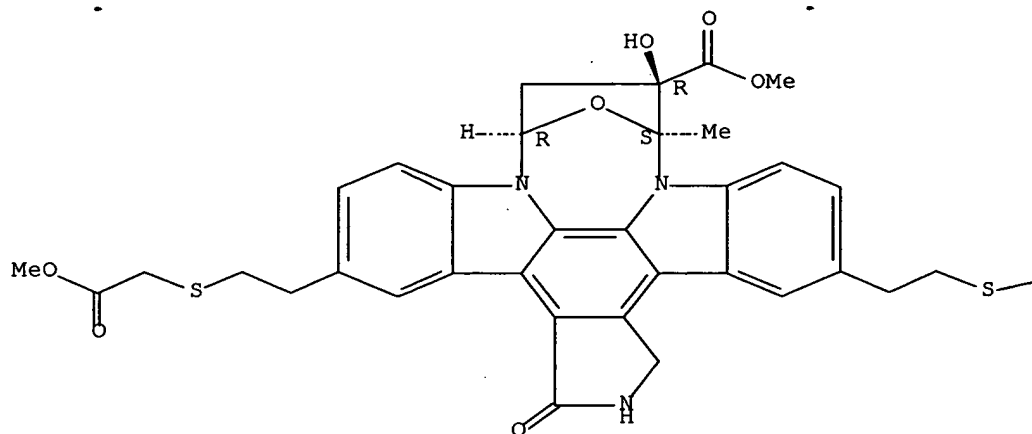


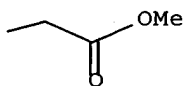
RN 200633-52-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis[2-[(2-methoxy-2-oxoethyl)thio]ethyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

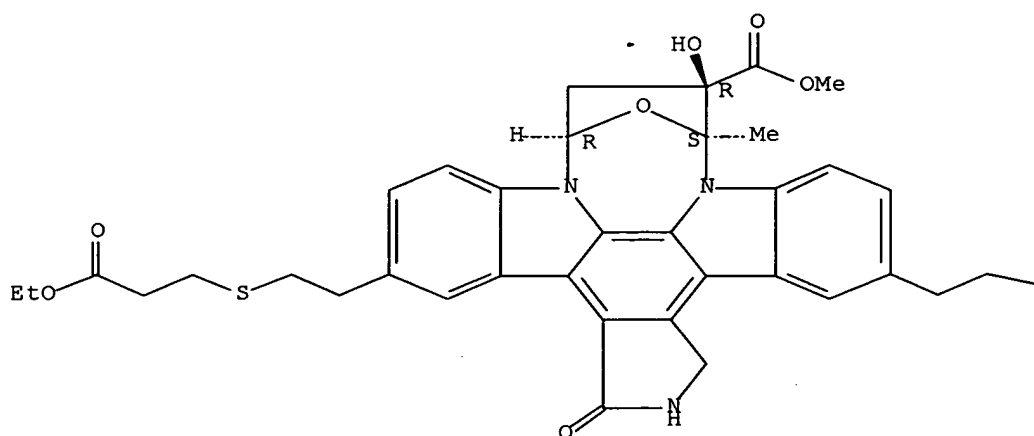
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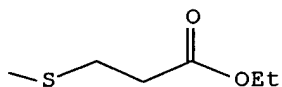




RN 200633-54-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[2-[(3-ethoxy-3-oxopropyl)thio]ethyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

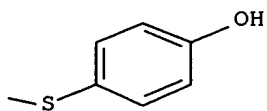
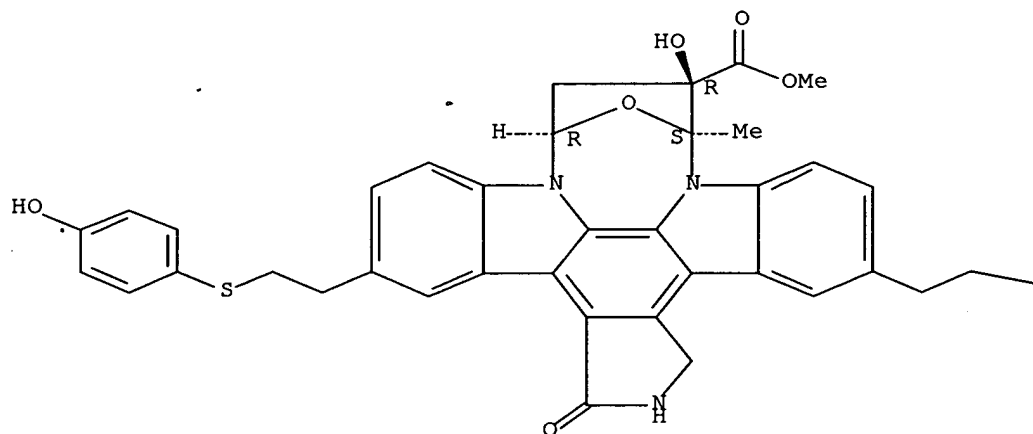
Absolute stereochemistry.





RN 200633-56-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis[2-[(4-hydroxyphenyl)thio]ethyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

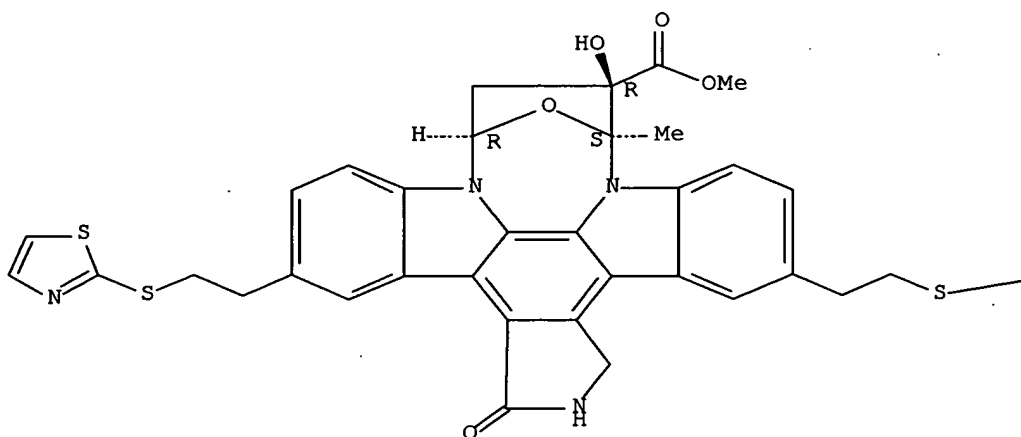
Absolute stereochemistry.



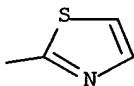
RN 200633-58-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[2-(2-thiazolylthio)ethyl]-, methyl ester,
 [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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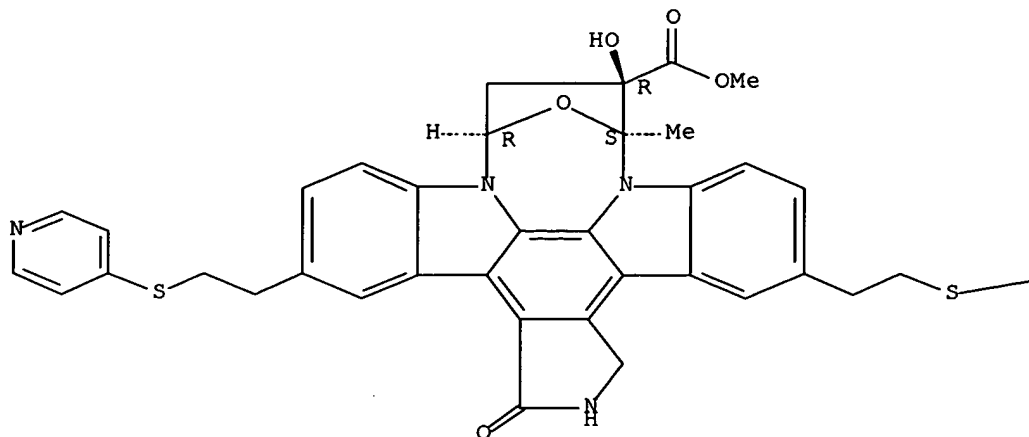
PAGE 1-B



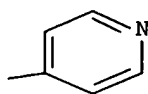
RN 200633-60-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[2-(4-pyridinylthio)ethyl]-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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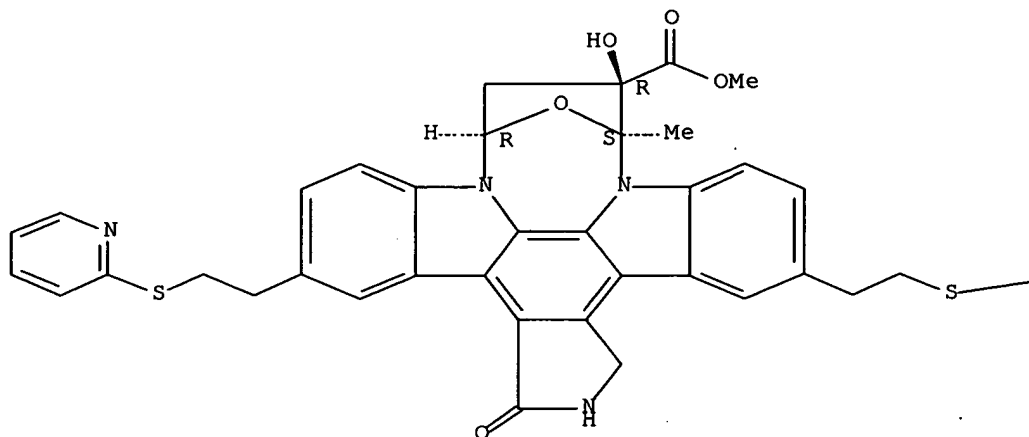
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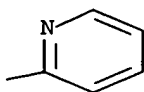
RN 200633-62-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[2-(2-pyridinylthio)ethyl]-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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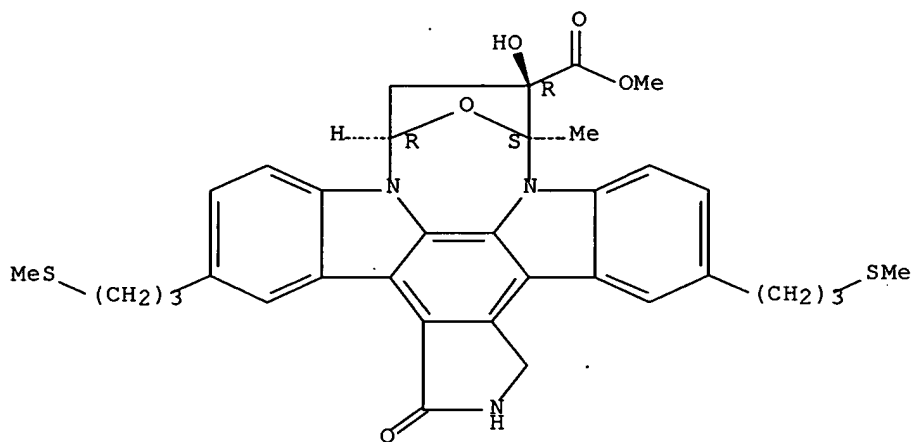
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RN 200633-64-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[3-(methylthio)propyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



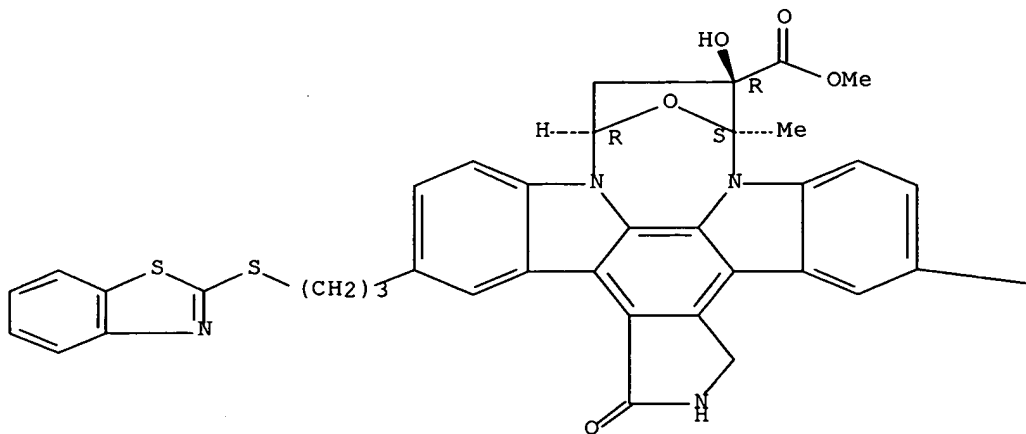
RN 200633-66-5 CAPLUS

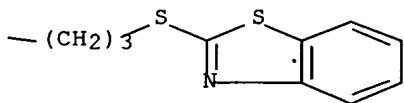
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[3-(2-benzothiazolylthio)propyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-

1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

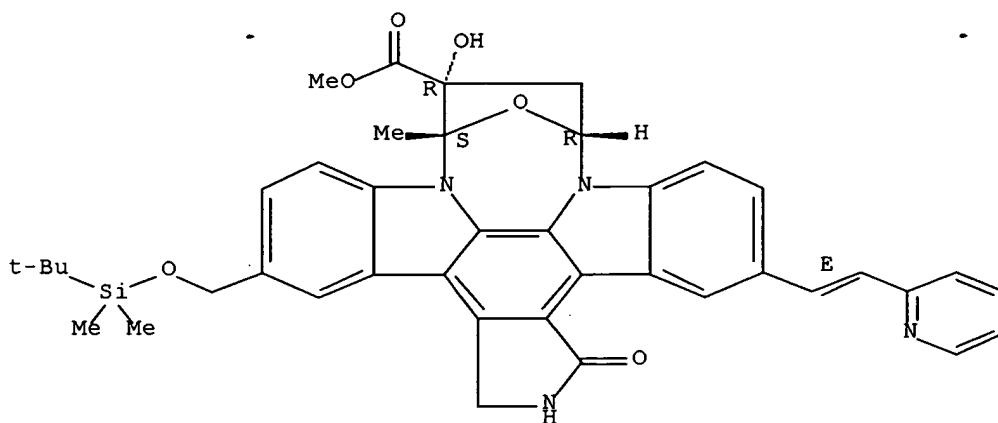
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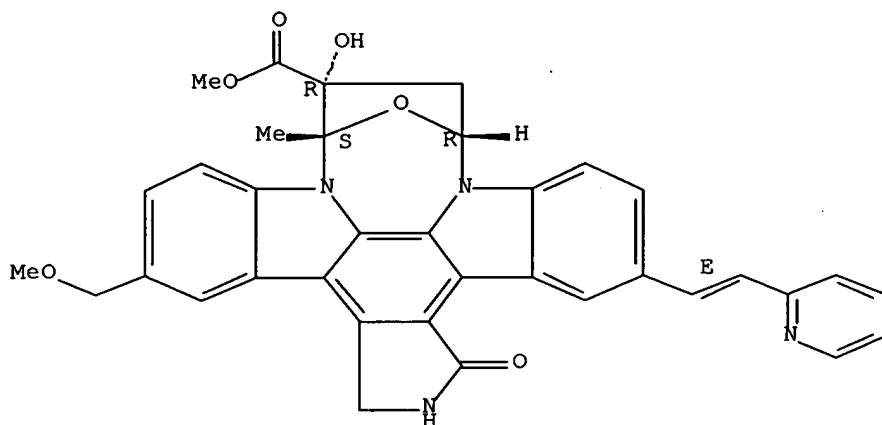
RN 200633-77-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 200633-79-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5-(methoxymethyl)-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

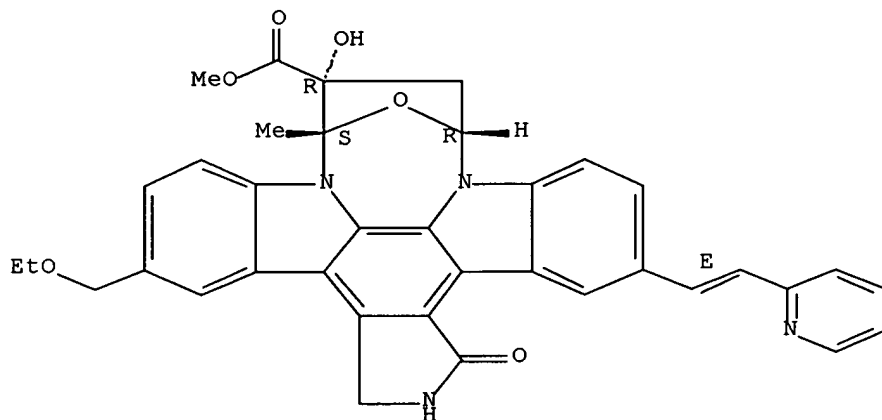


RN 200633-81-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



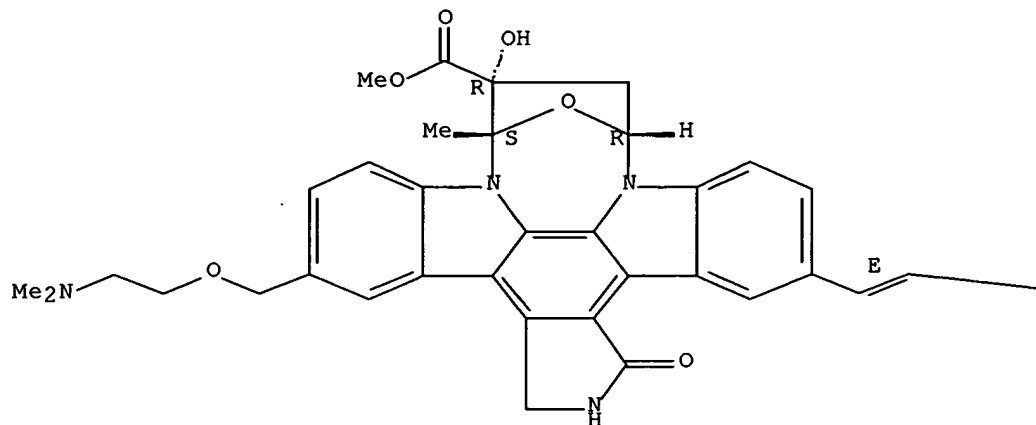
RN 200633-83-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[[2-(dimethylamino)ethoxy]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

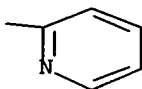
Absolute stereochemistry.

Double bond geometry as shown.

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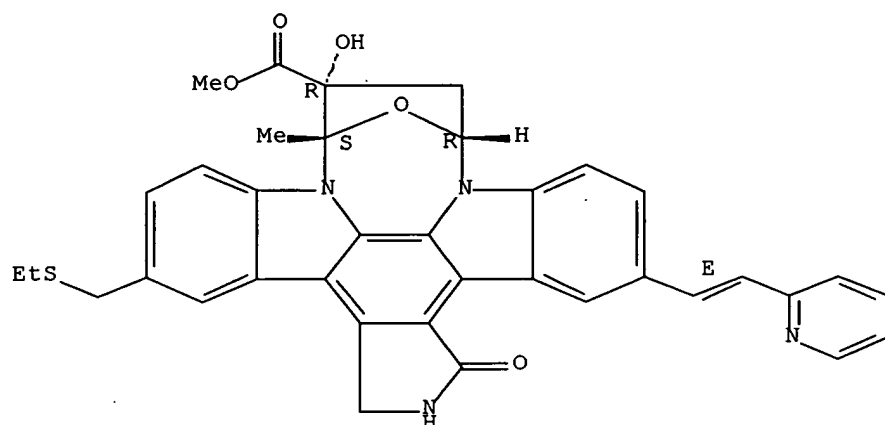


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RN 200633-85-8 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

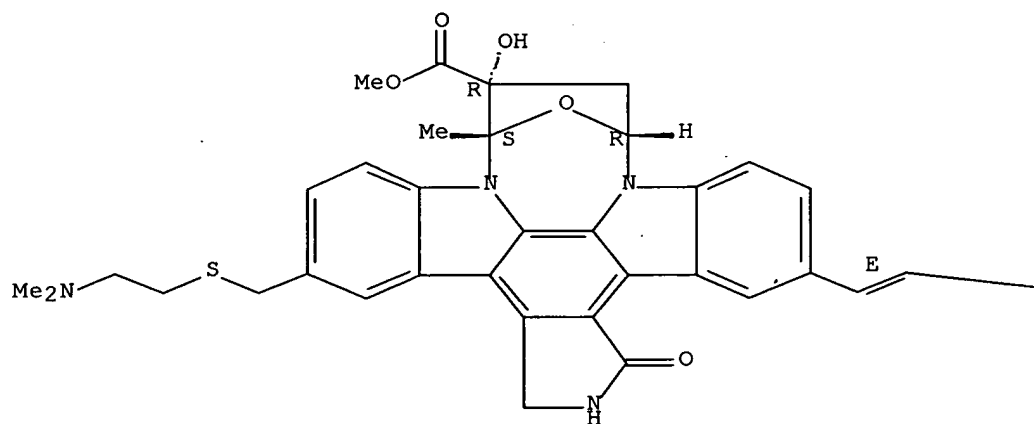
Absolute stereochemistry.
Double bond geometry as shown.

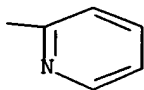


RN 200633-87-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

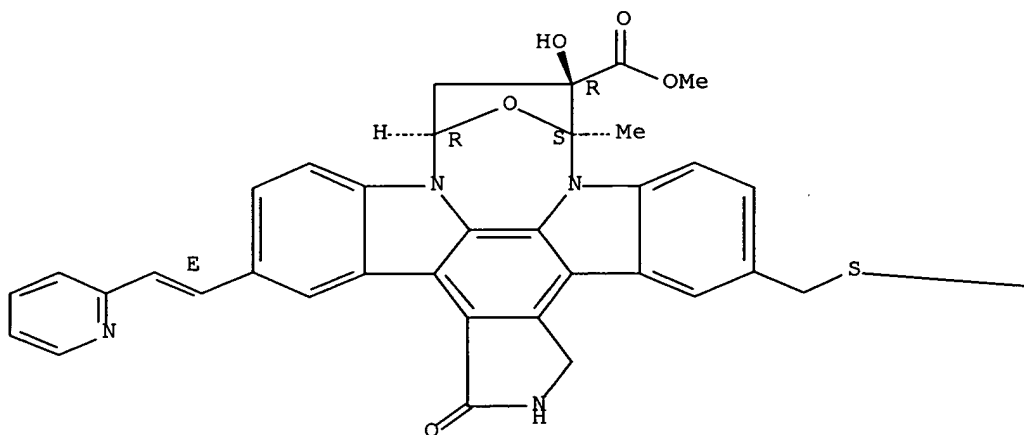
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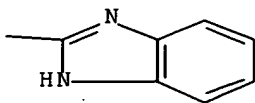




RN 200633-89-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[(1H-benzimidazol-2-ylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

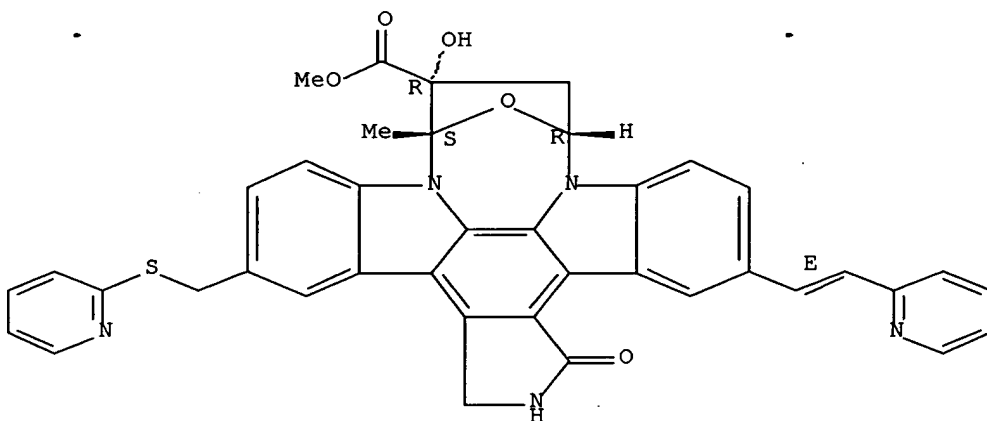
Absolute stereochemistry.
 Double bond geometry as shown.





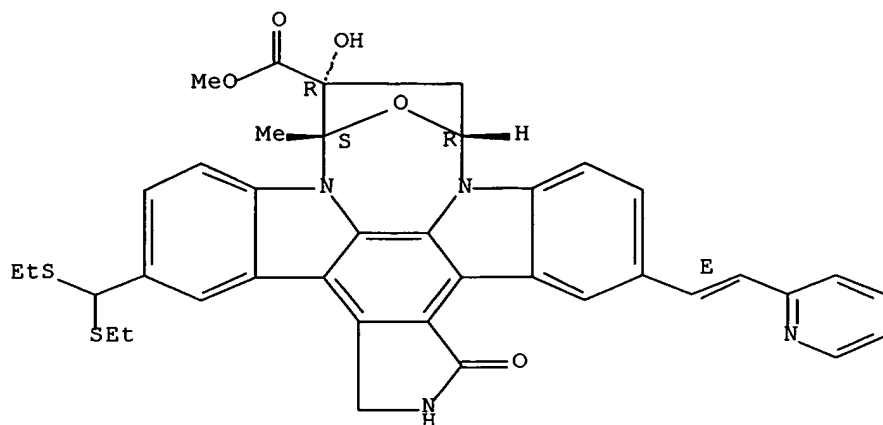
RN 200633-91-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-5-[(2-pyridinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 200633-98-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[bis(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

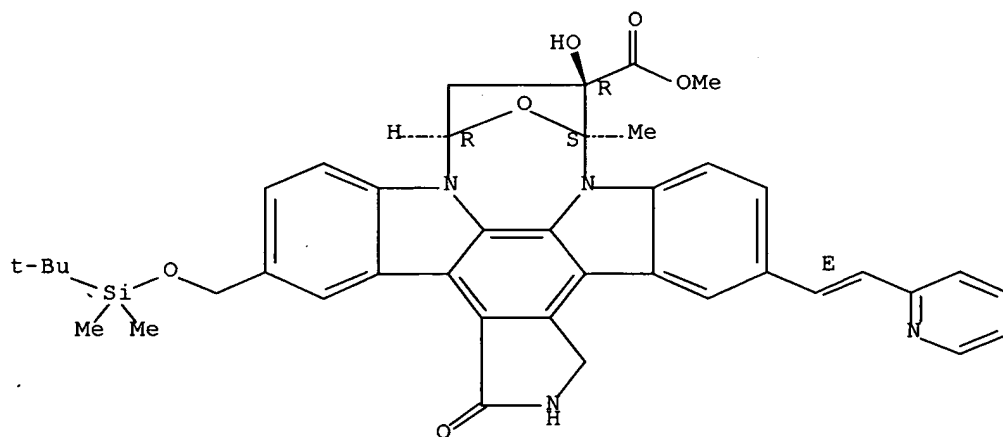


RN 200634-13-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

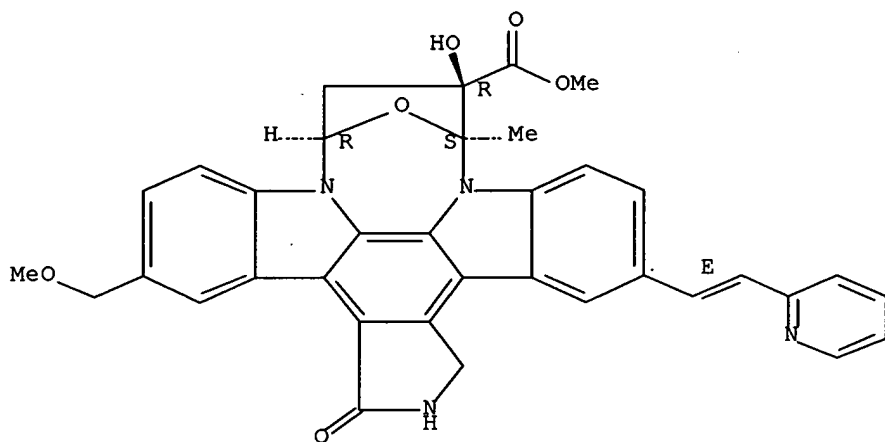


RN 200634-17-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-16-(methoxymethyl)-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

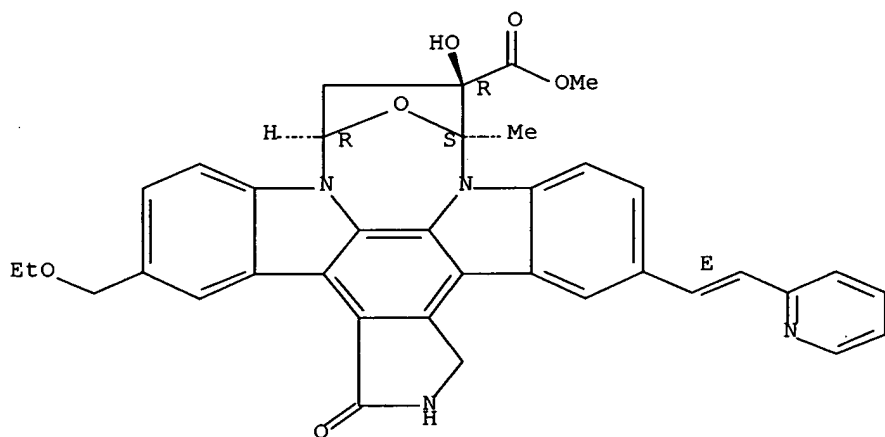


RN 200634-21-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

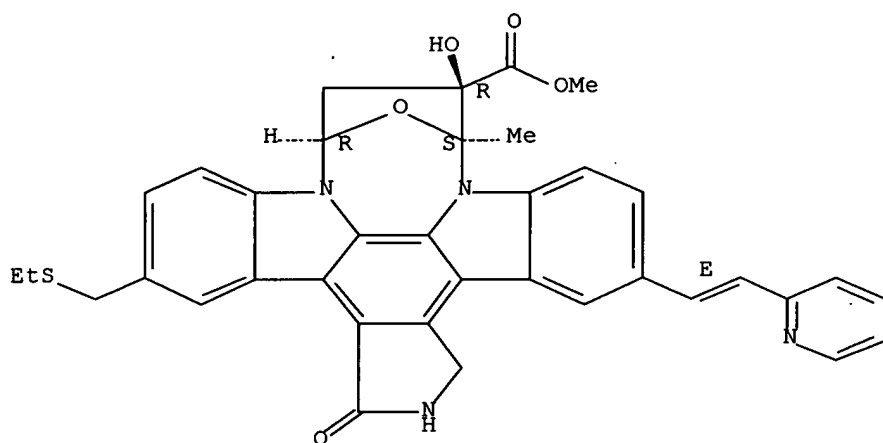


RN 200634-25-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

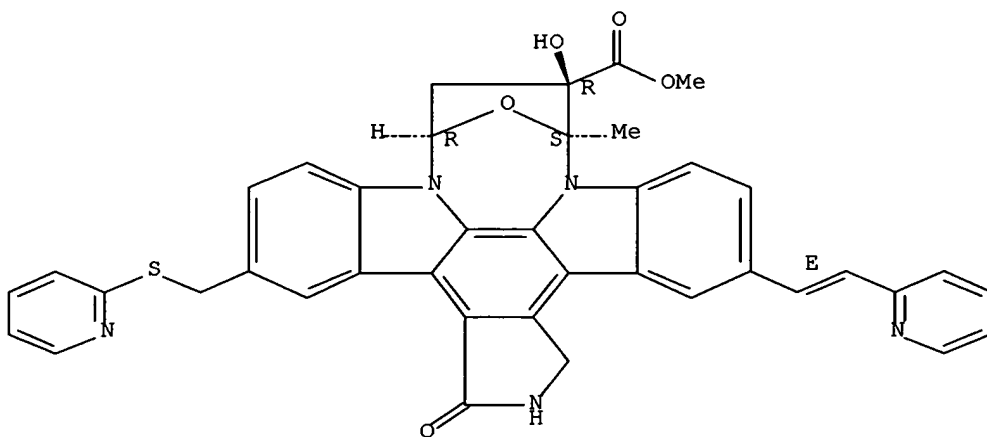
Absolute stereochemistry.

Double bond geometry as shown.



RN 200634-28-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-16-[(2-pyridinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

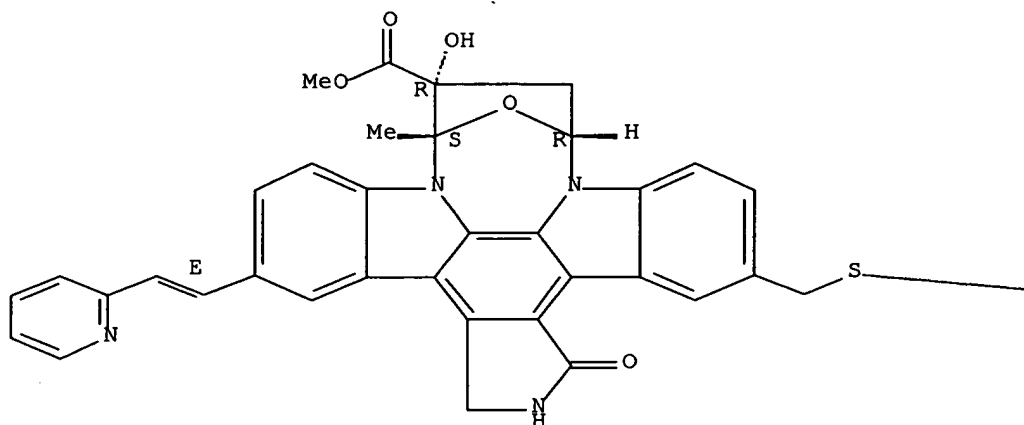
Absolute stereochemistry.
 Double bond geometry as shown.



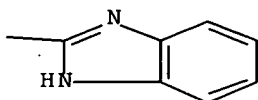
RN 200634-32-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(1H-benzimidazol-2-ylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

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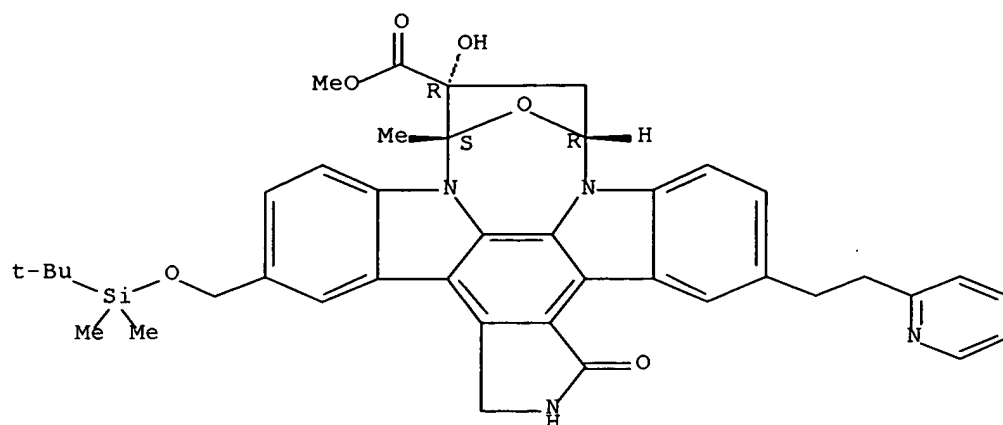


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RN 200634-54-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

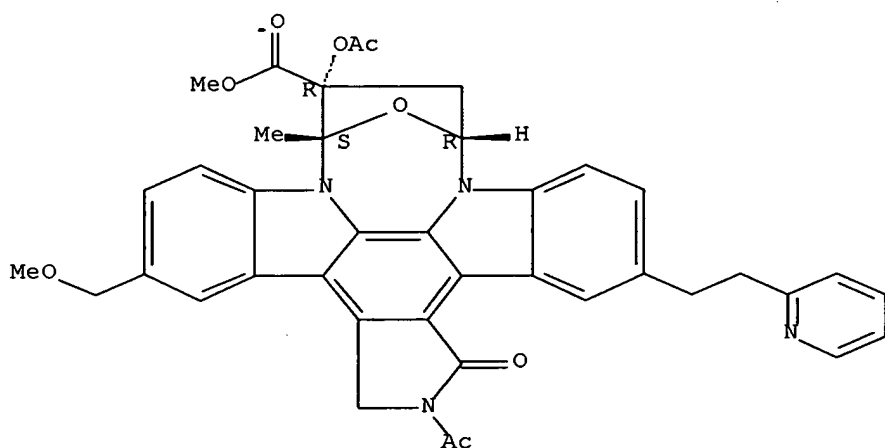
Absolute stereochemistry.



RN 200634-58-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5-(methoxymethyl)-9-methyl-1-oxo-16-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

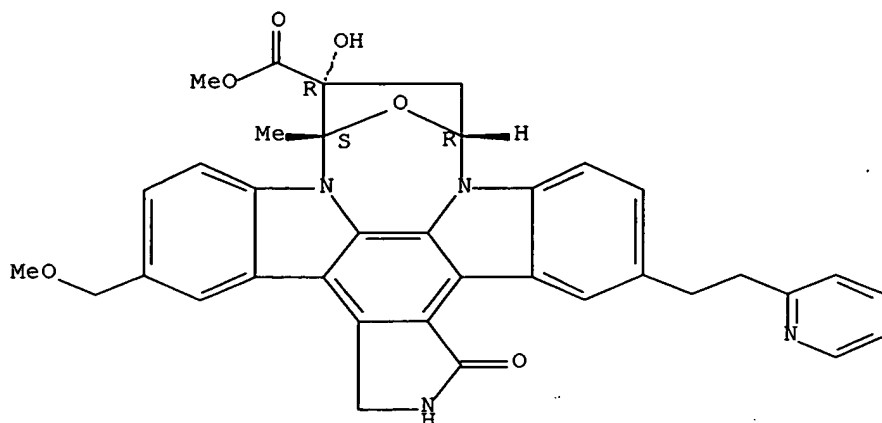
Absolute stereochemistry.



RN 200634-63-5 CAPLUS

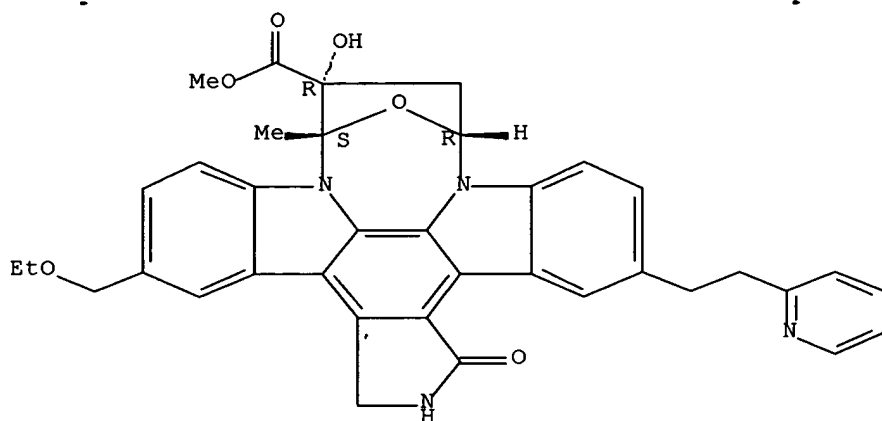
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5-(methoxymethyl)-9-methyl-1-oxo-16-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



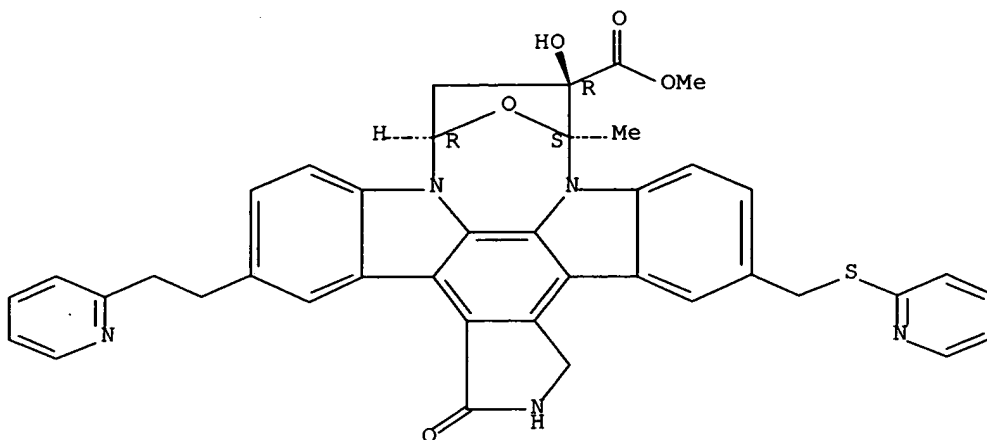
RN 200634-68-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200634-79-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[2-(2-pyridinyl)ethyl]-5-[(2-pyridinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

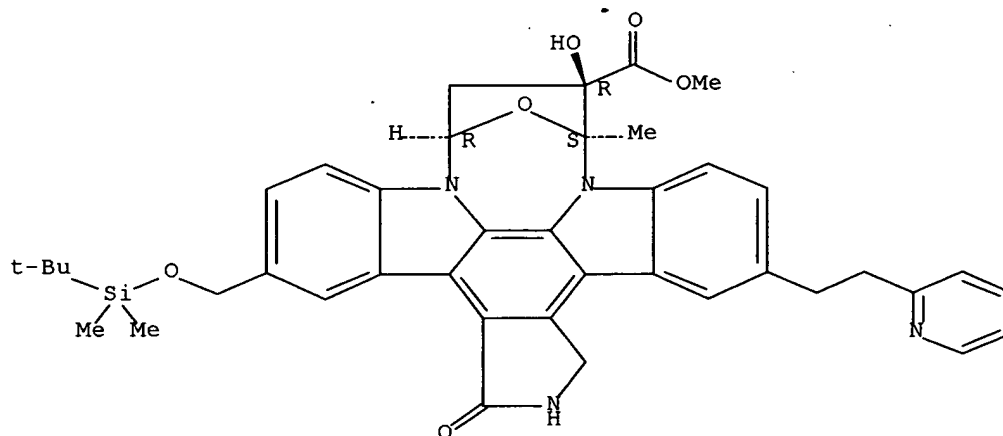
Absolute stereochemistry.



RN 200634-91-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

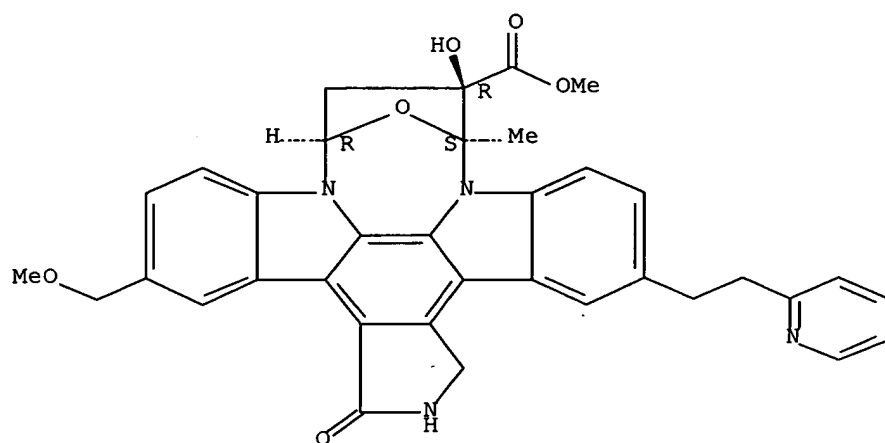
Absolute stereochemistry.



RN 200634-97-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-16-(methoxymethyl)-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

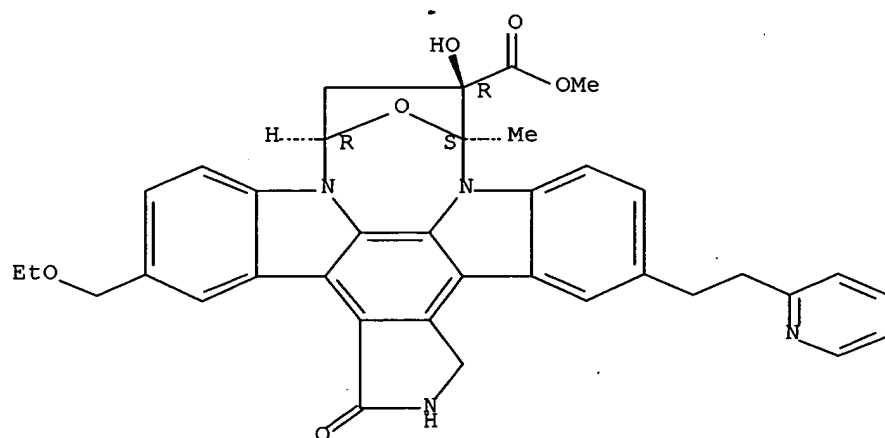
Absolute stereochemistry.



RN 200635-01-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

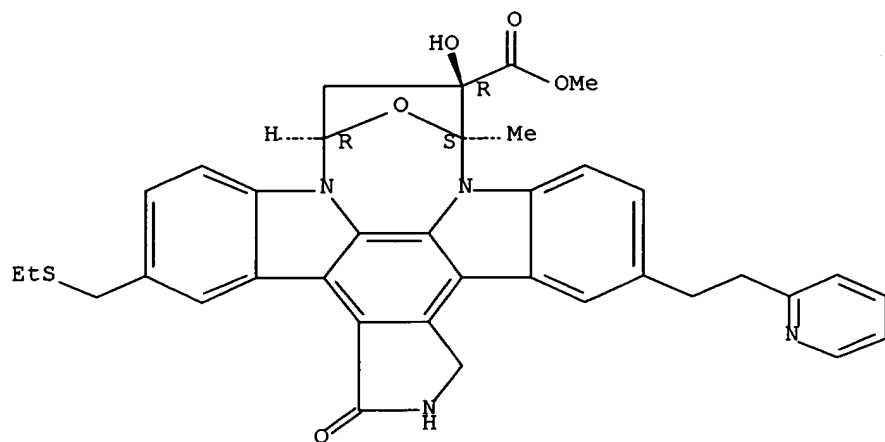
Absolute stereochemistry.



RN 200635-07-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

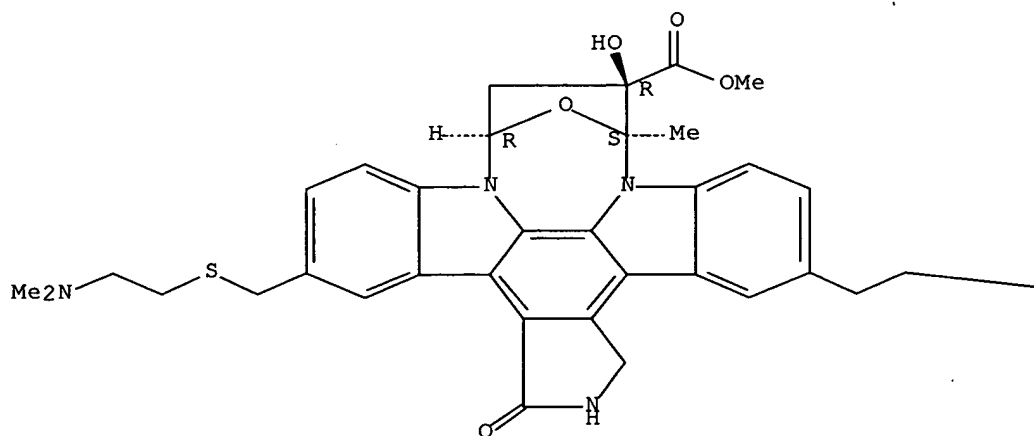


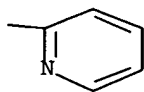
RN 200635-13-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)-(9CI)
(CA INDEX NAME)

Absolute stereochemistry.

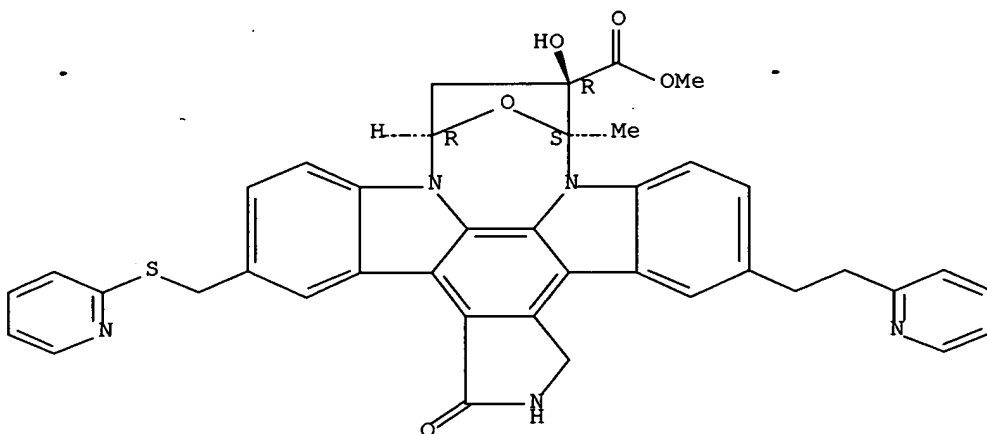
PAGE 1-A





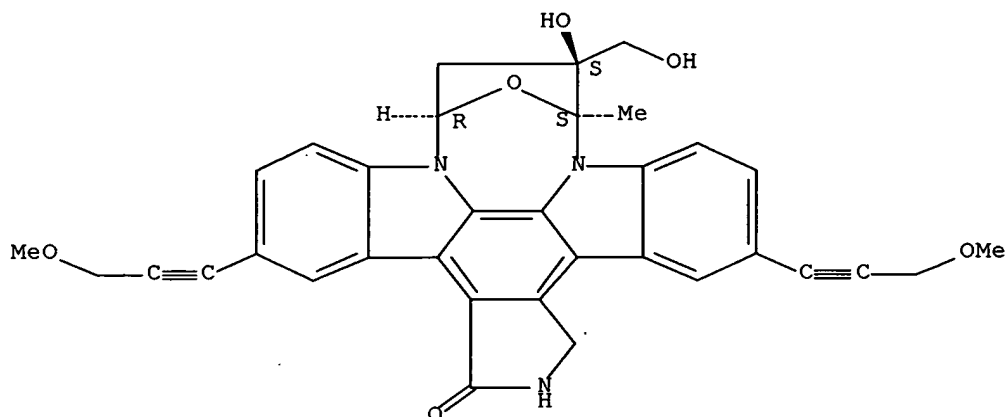
RN 200635-23-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-16-[(2-pyridinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



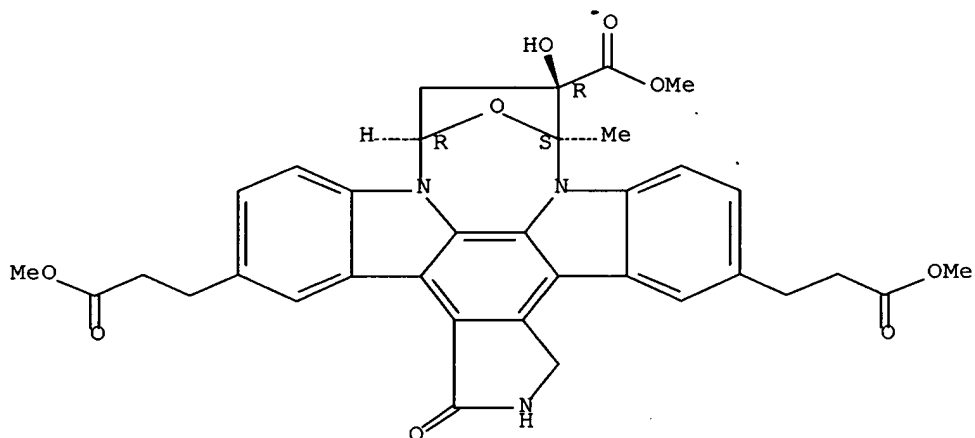
RN 200635-27-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocin-1-one, 2,3,9,10,11,12-hexahydro-10-hydroxy-10-(hydroxymethyl)-5,16-bis(3-methoxy-1-propynyl)-9-methyl-, (9S,10S,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



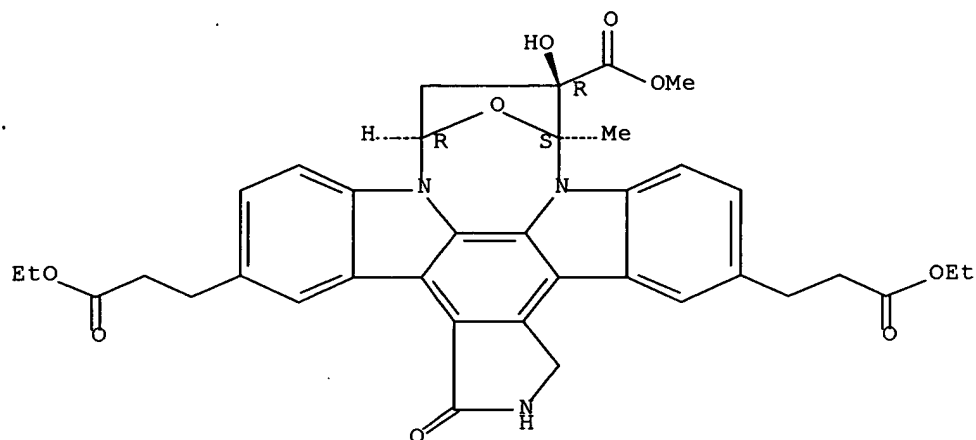
RN 200635-31-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-5,16-dipropynoic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-10-(methoxycarbonyl)-9-methyl-1-oxo-, dimethyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200635-35-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-5,16-dipropanoic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-10-(methoxycarbonyl)-9-methyl-1-oxo-, diethyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

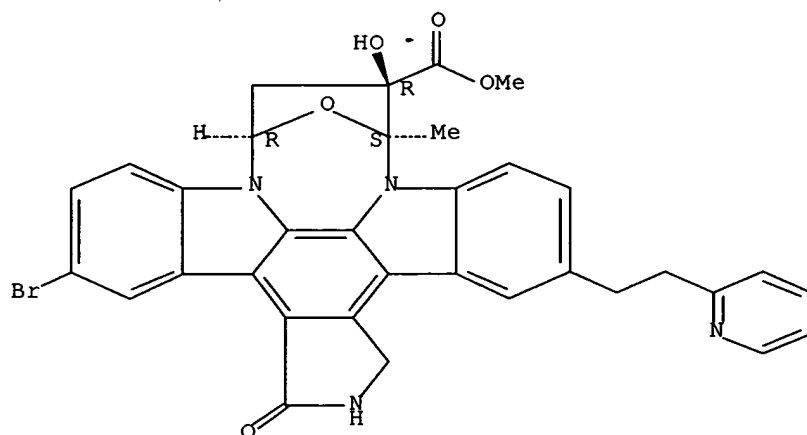
Absolute stereochemistry.



RN 200635-50-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-bromo-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

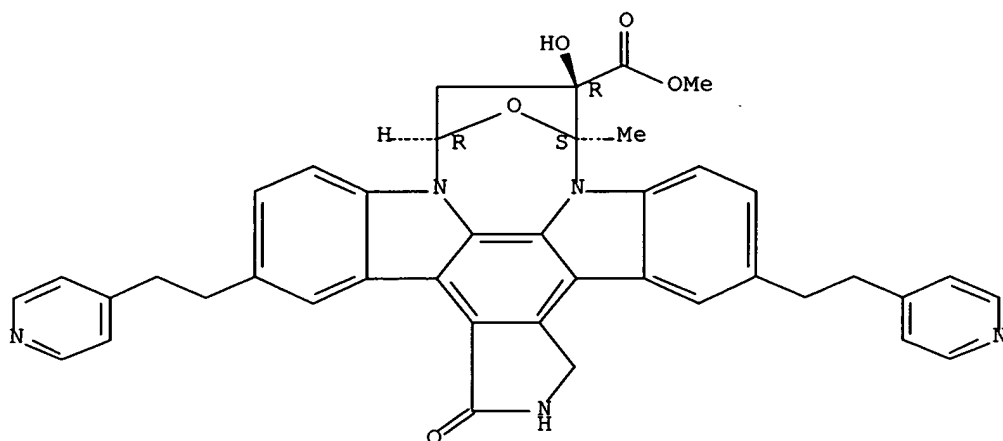
Absolute stereochemistry.



RN 200635-62-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[2-(4-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

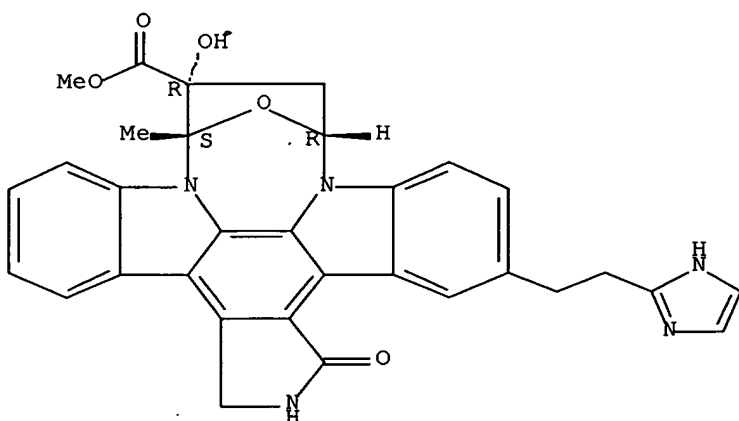
Absolute stereochemistry.



RN 200635-78-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-16-[2-(1H-imidazol-2-yl)ethyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

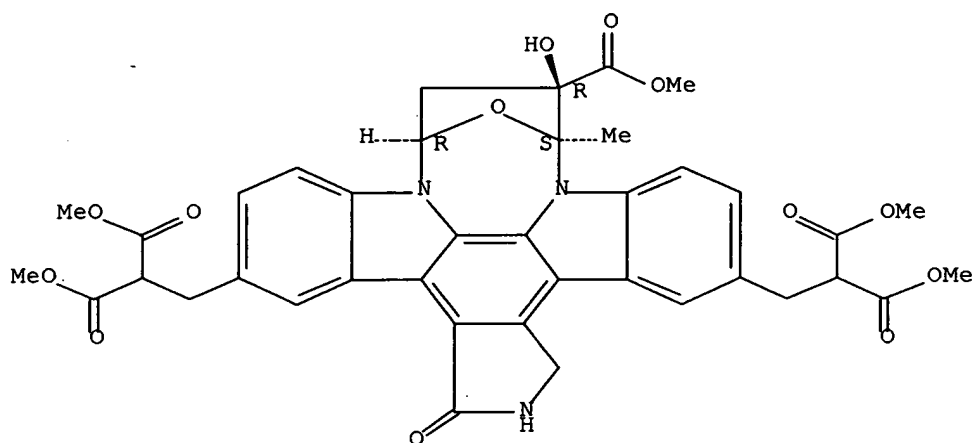
Absolute stereochemistry.



RN 200635-96-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-5,16-dipropionic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-.alpha.,.alpha.',10-tris(methoxycarbonyl)-9-methyl-1-oxo-, dimethyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

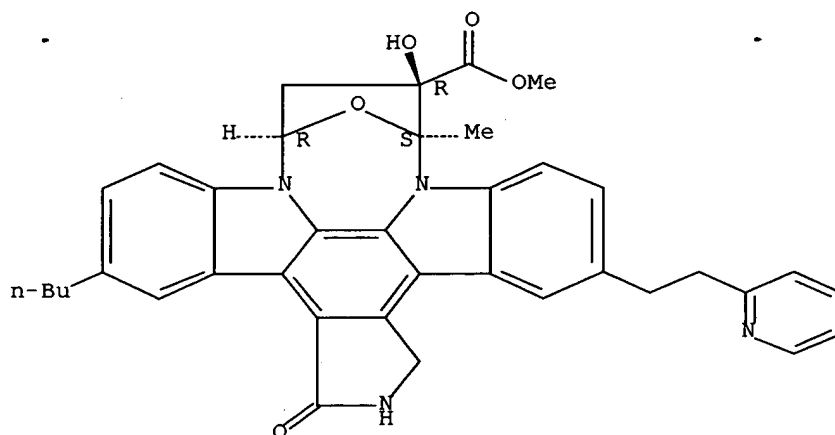
Absolute stereochemistry.



RN 200636-00-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-butyl-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

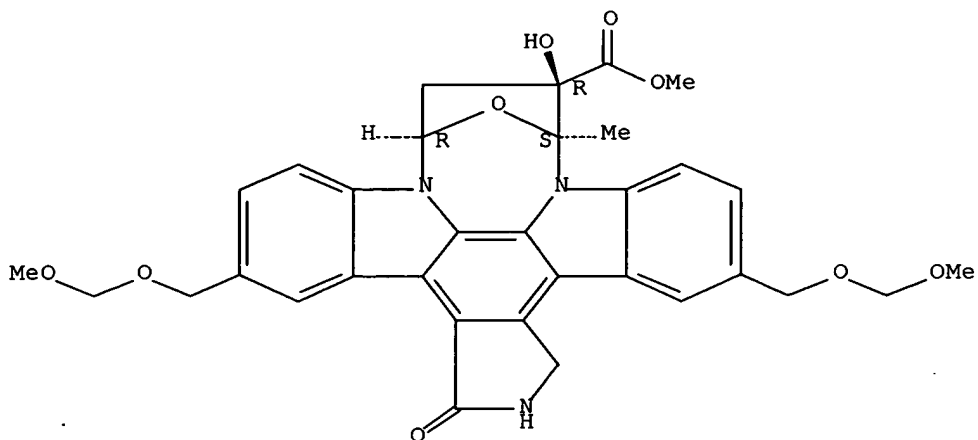
Absolute stereochemistry.



RN 200636-09-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis[(methoxymethoxy)methyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

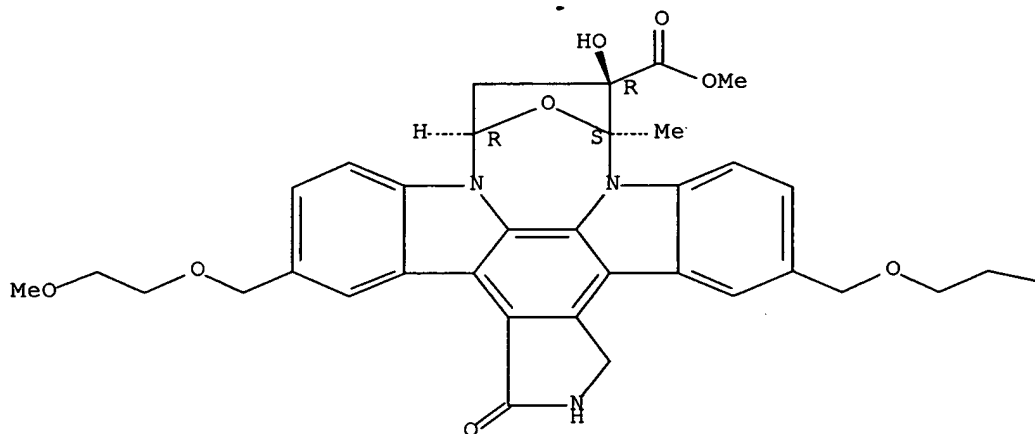


RN 200636-21-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis[(2-methoxyethoxy)methyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

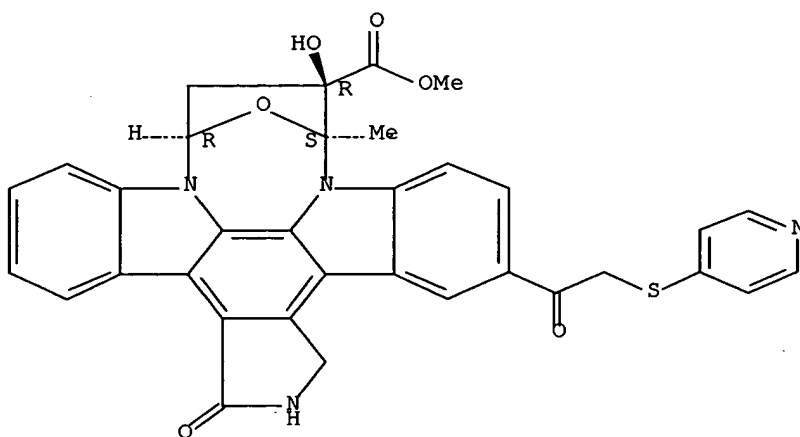
PAGE 1-A



—OMe

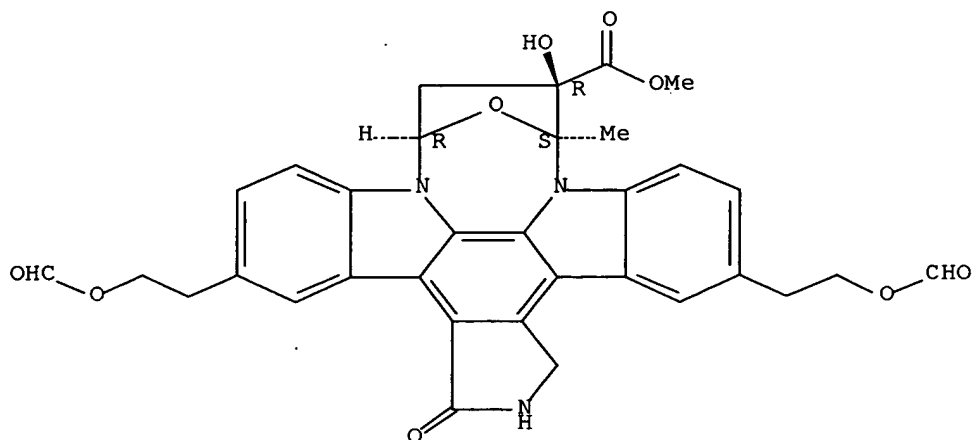
RN 200637-38-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(4-pyridinylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200637-39-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[2-(formyloxy)ethyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

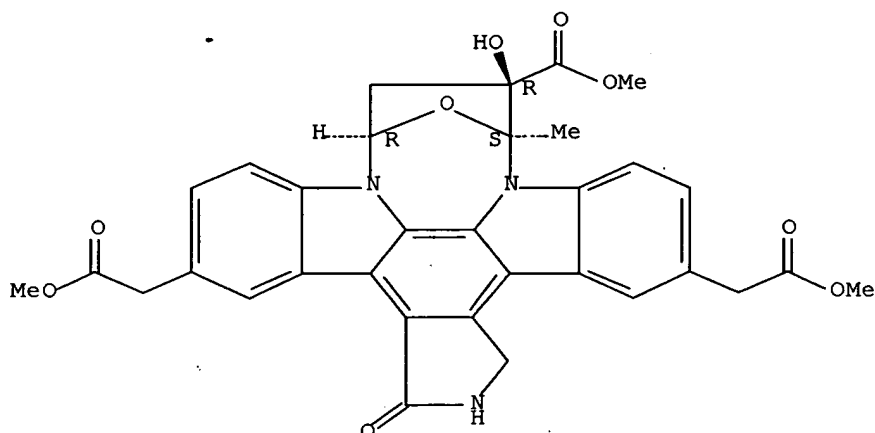
Absolute stereochemistry.



RN 200637-40-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-5,16-diacetic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-10-(methoxycarbonyl)-9-methyl-1-oxo-, dimethyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

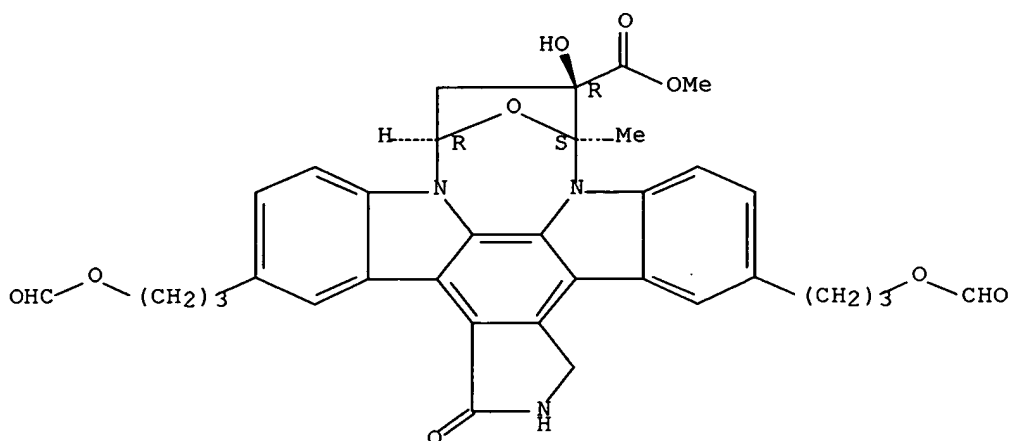
Absolute stereochemistry.



RN 200637-41-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[3-(formyloxy)propyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

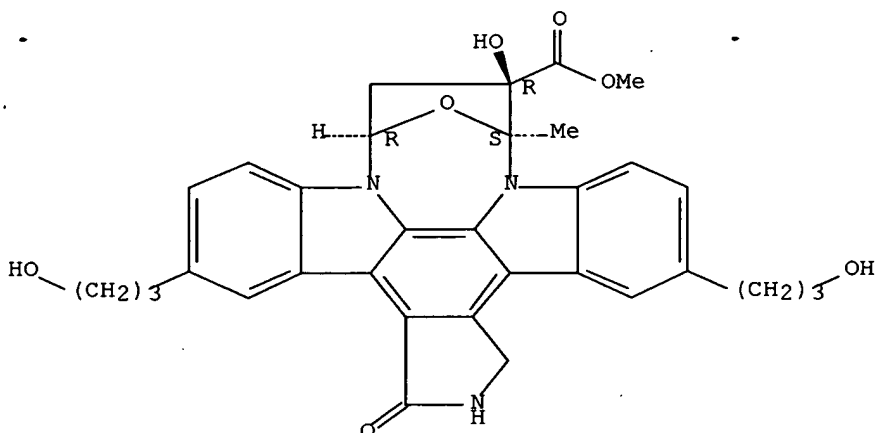
Absolute stereochemistry.



RN 200637-42-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(3-hydroxypropyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

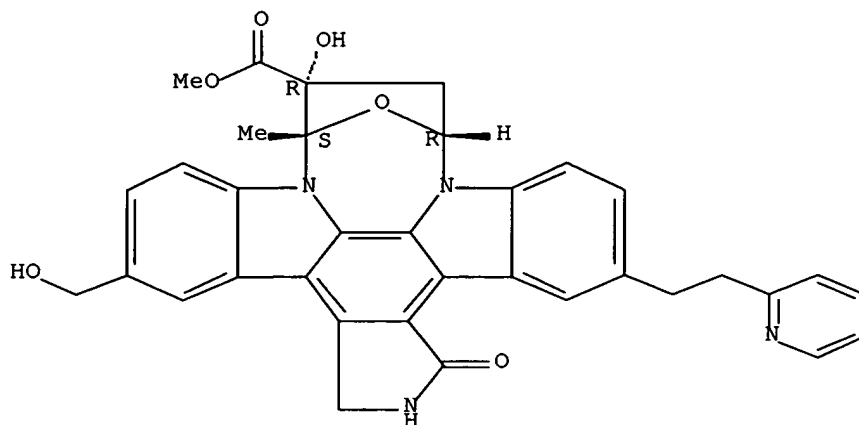
Absolute stereochemistry.



RN 200637-44-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-16-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

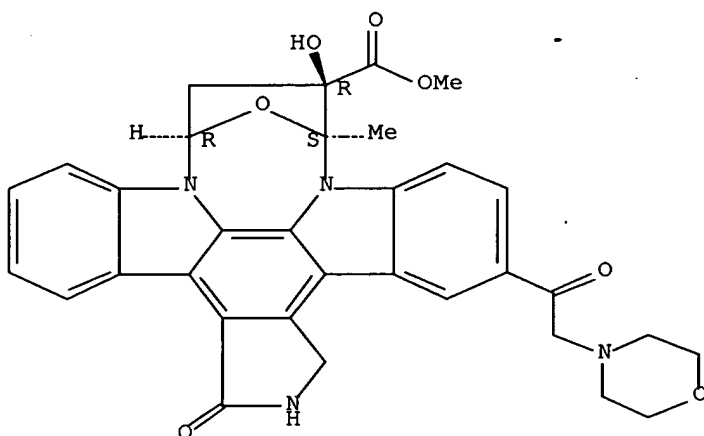
Absolute stereochemistry.



RN 200637-45-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5-(4-morpholinylacetyl)-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 118777-30-3 118777-58-5 118777-59-6

118777-60-9 121664-78-6 156177-91-2

178404-44-9 200637-48-5 200637-50-9

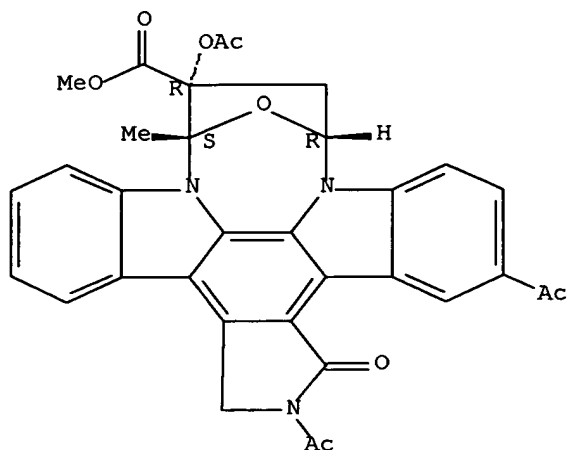
RL: RCT (Reactant); RACT (Reactant or reagent)

(synthesis and neurotropic activity of selected derivs. of K-252a)

RN 118777-30-3 CAPLUS

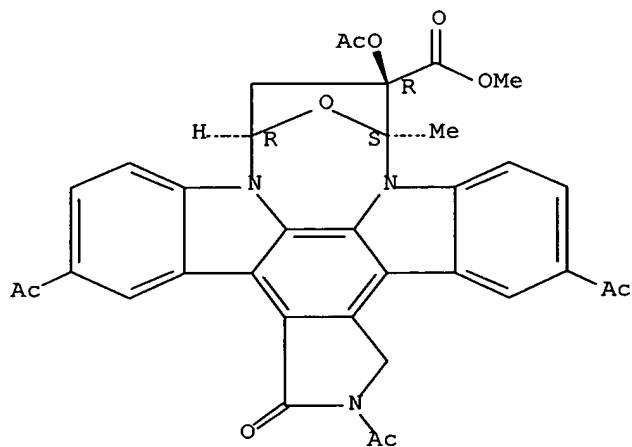
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,16-diacetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



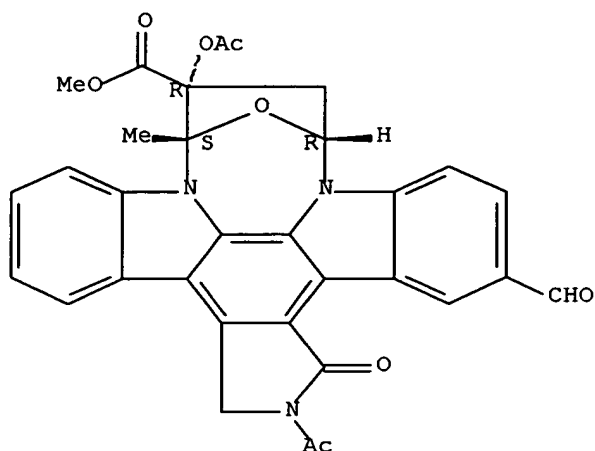
RN 118777-58-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,5,16-triacetyl-10-(acetyloxy)-
 2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.



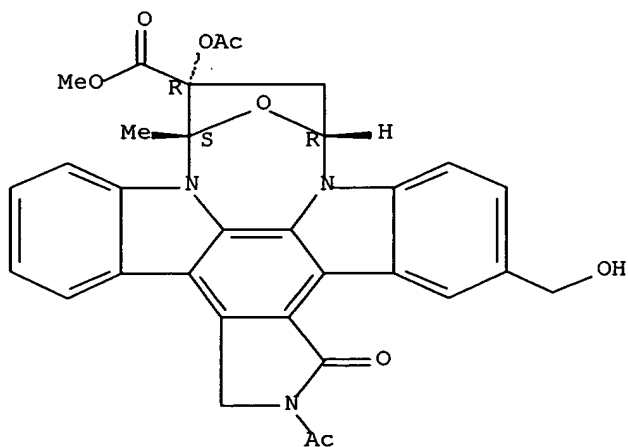
RN 118777-59-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



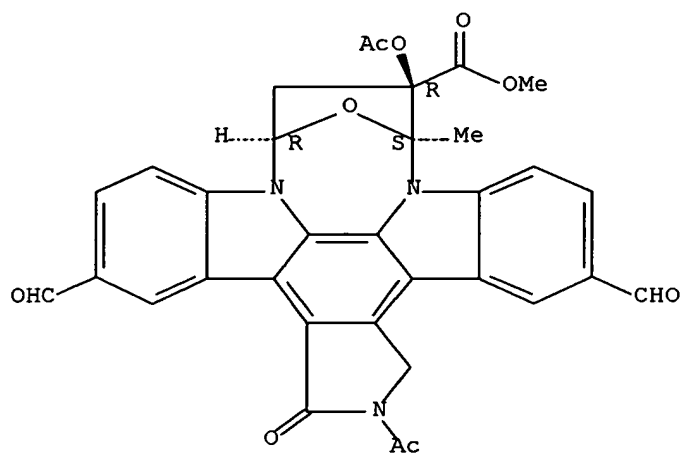
RN 118777-60-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 121664-78-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-diformyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R) - (9CI) (CA INDEX NAME)

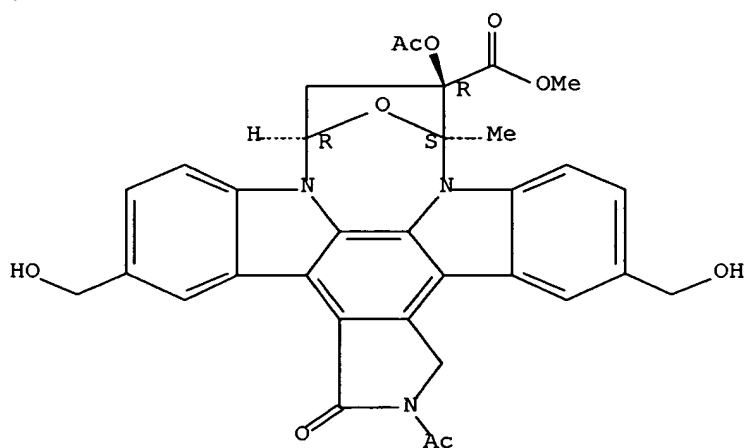
Absolute stereochemistry.



RN 156177-91-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

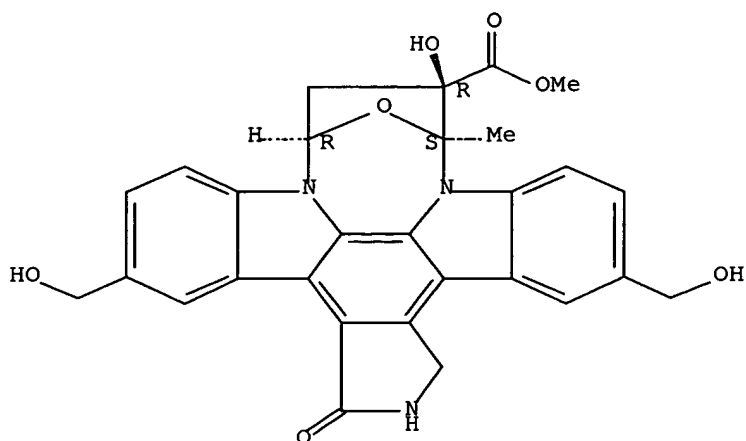
Absolute stereochemistry.



RN 178404-44-9 CAPLUS

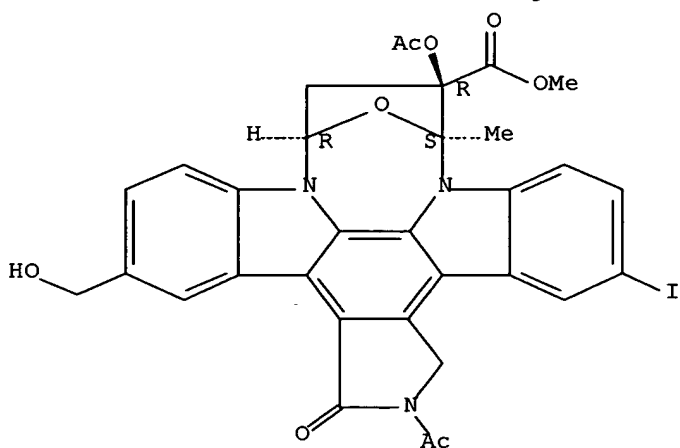
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



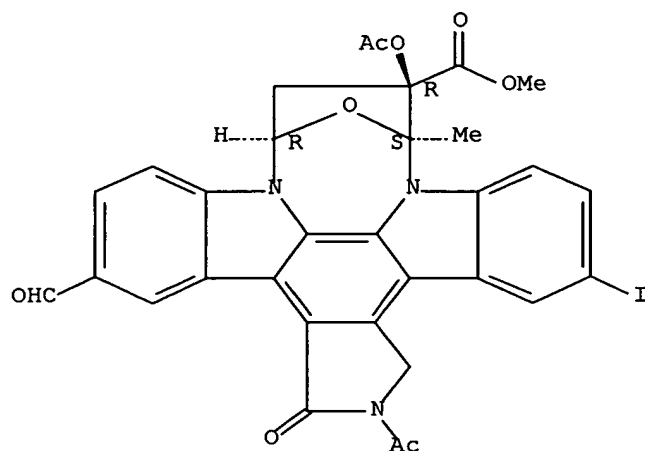
RN 200637-48-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-(hydroxymethyl)-5-iodo-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200637-50-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-formyl-2,3,9,10,11,12-hexahydro-5-iodo-9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 200636-49-3P 200636-53-9P 200636-57-3P
 200636-60-8P 200636-62-0P 200636-65-3P
 200636-68-6P 200636-72-2P 200636-76-6P
 200636-79-9P 200636-81-3P 200636-83-5P
 200636-85-7P 200636-88-0P 200636-90-4P
 200636-92-6P 200636-95-9P 200636-98-2P
 200637-00-9P 200637-01-0P 200637-02-1P
 200637-04-3P 200637-05-4P 200637-06-5P
 200637-07-6P 200637-08-7P 200637-09-8P
 200637-10-1P 200637-11-2P 200637-12-3P
 200637-13-4P 200637-15-6P 200637-17-8P
 200637-22-5P 200637-23-6P 200637-25-8P
 200637-29-2P 200637-31-6P 200637-32-7P
 200637-35-0P 200637-51-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

(Reactant or reagent)

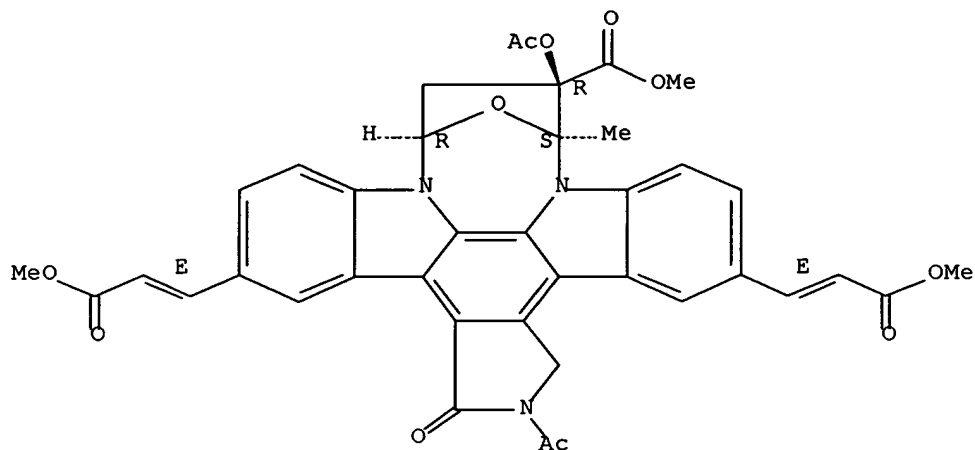
(synthesis and neurotropic activity of selected derivs. of K-252a)

RN 200636-49-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5,16-bis[(1E)-3-methoxy-3-oxo-1-propenyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

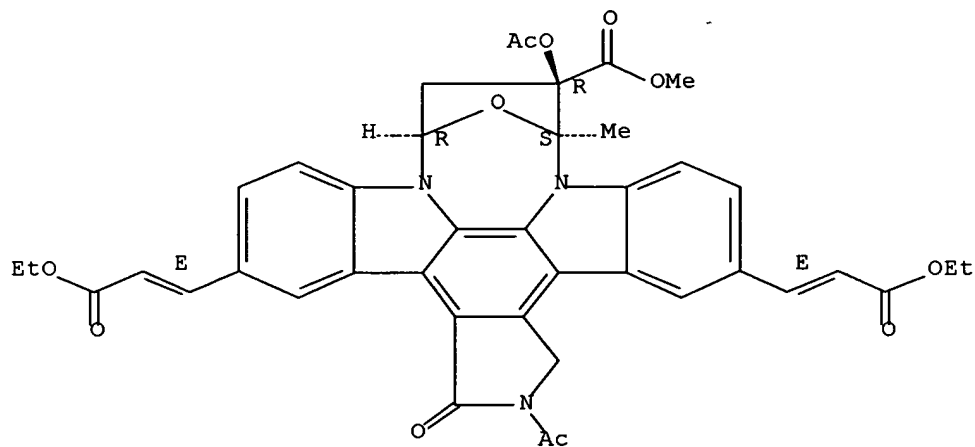


RN 200636-53-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis[(1E)-3-ethoxy-3-oxo-1-propenyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

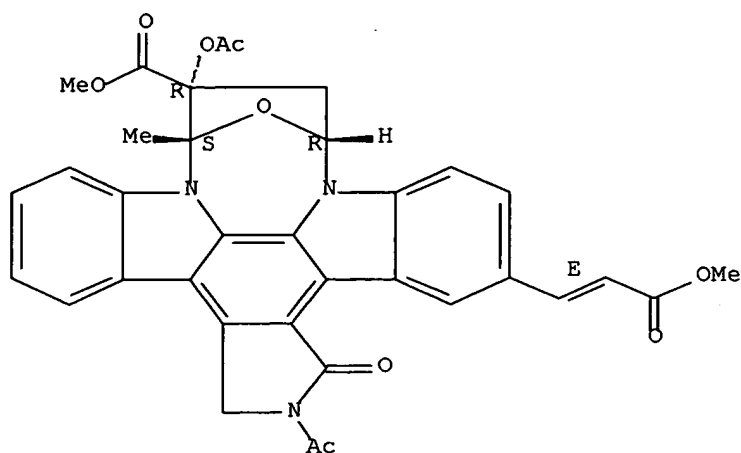


RN 200636-57-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-[(1E)-3-methoxy-3-oxo-1-propenyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

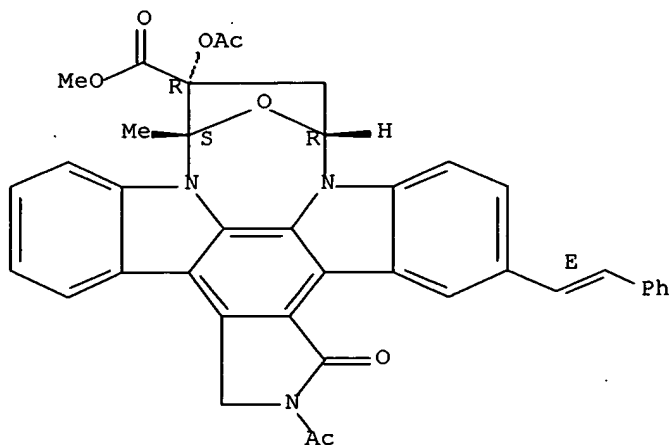
Absolute stereochemistry.

Double bond geometry as shown.



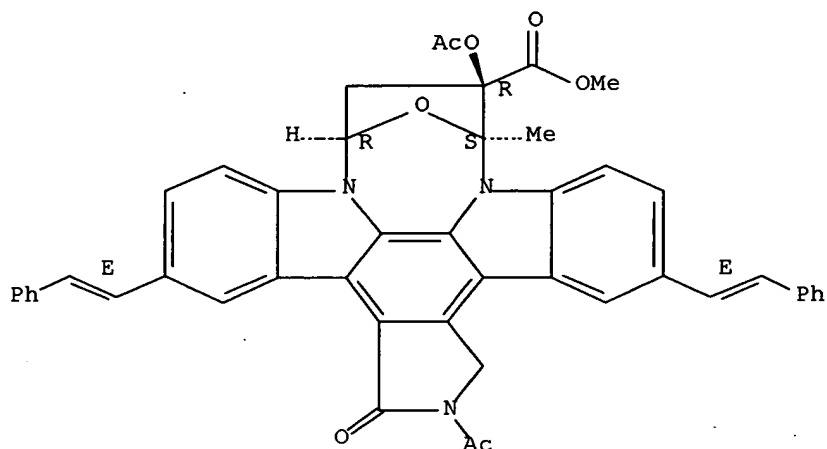
RN 200636-60-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-(2-phenylethenyl)-, methyl ester, [9S-[9.alpha.,10.beta.,12.alpha.,16(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



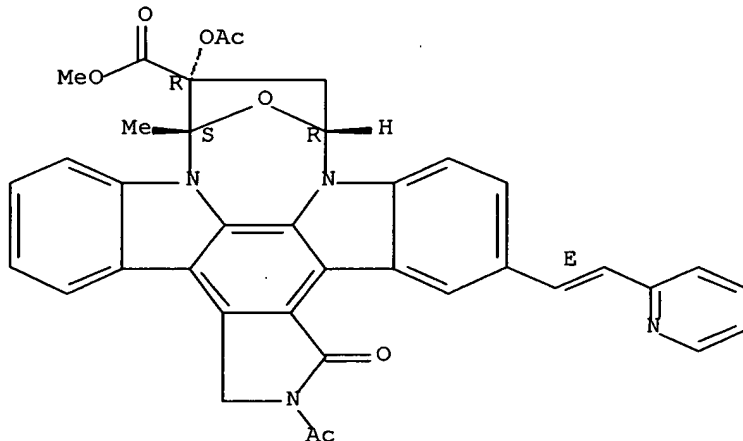
RN 200636-62-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5,16-bis(2-phenylethenyl)-, methyl ester, [9S-[5(E),9.alpha.,10.beta.,12.alpha.,16(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



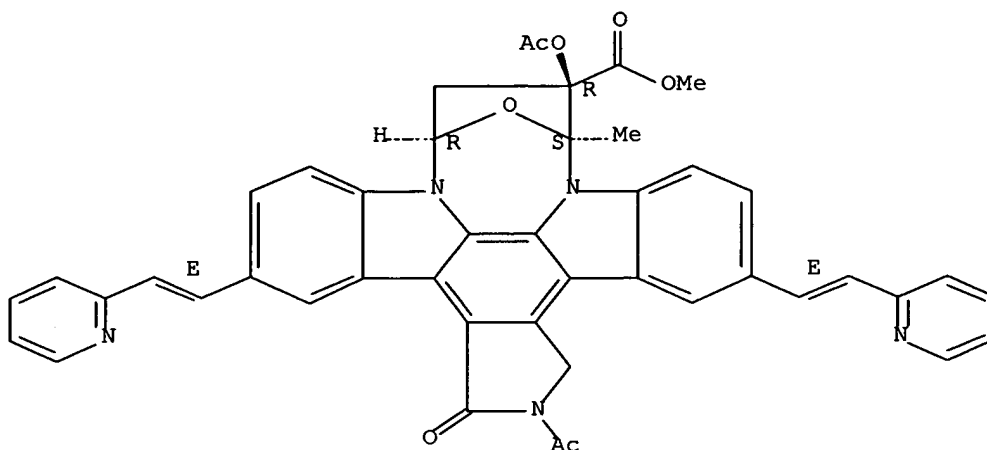
RN 200636-65-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



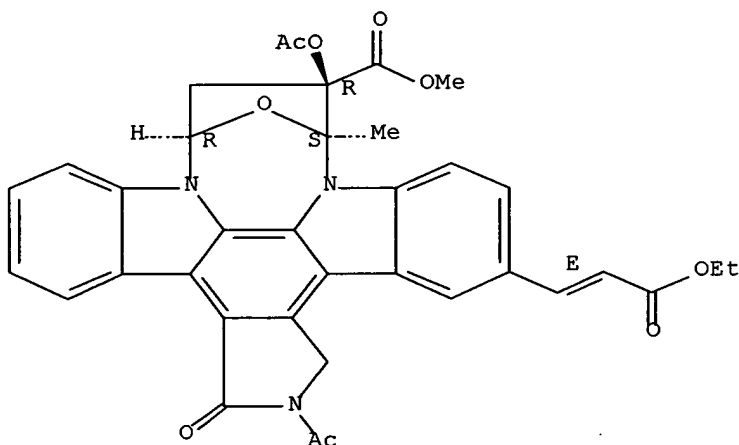
RN 200636-68-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5,16-bis[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



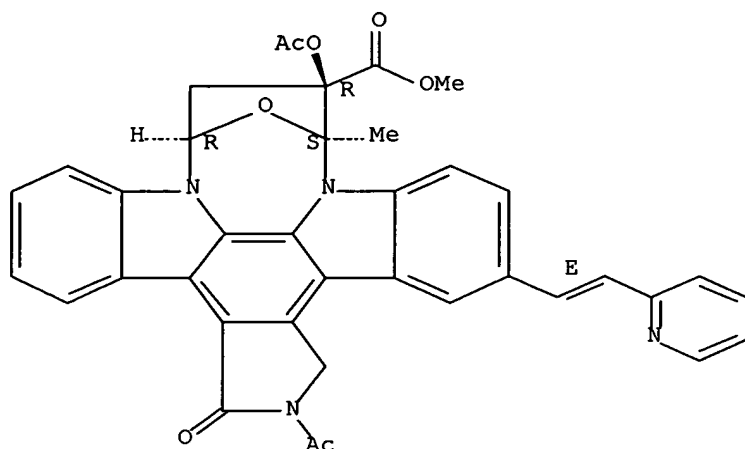
RN 200636-72-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-[(1E)-3-ethoxy-3-oxo-1-propenyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 200636-76-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethenyl]-, methyl ester, [9S-[5(E),9.alpha.,10.beta.,12.alpha.]]-(9CI) (CA INDEX NAME)

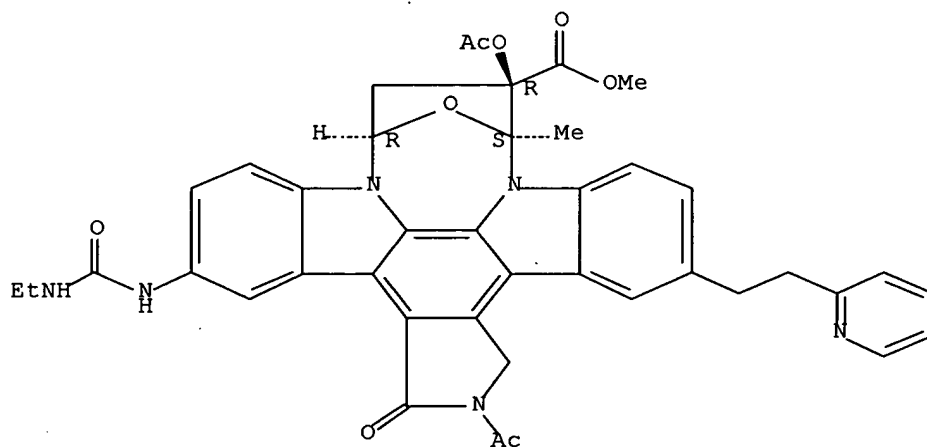
Absolute stereochemistry.
 Double bond geometry as shown.



RN 200636-79-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[(ethylamino) carbonyl] amino]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

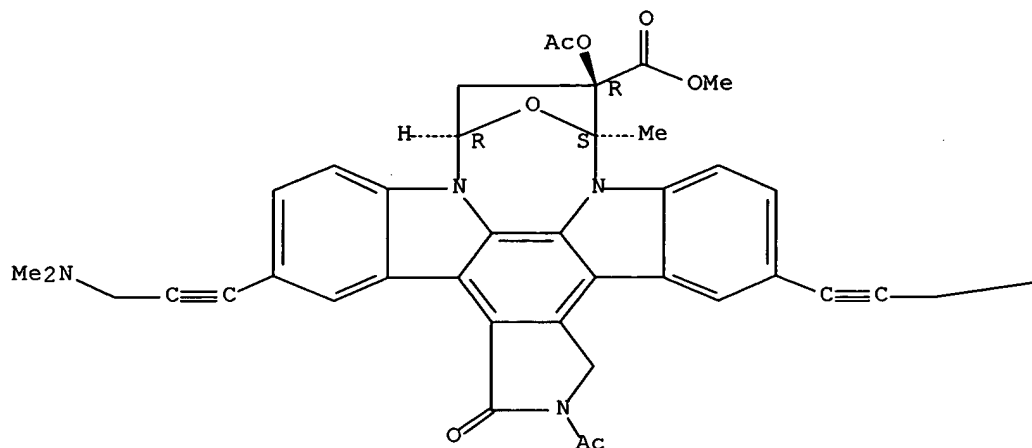
Absolute stereochemistry.



RN 200636-81-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis[3-(dimethylamino)-1-propynyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

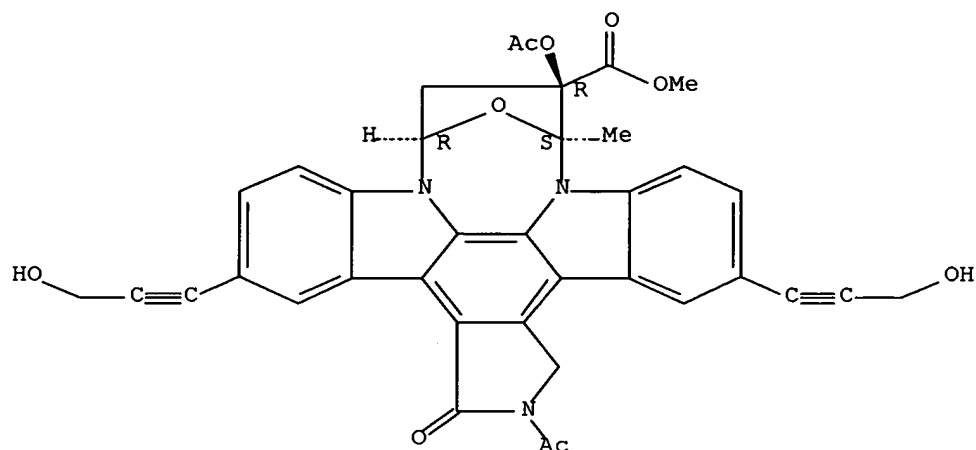


—NMe₂

RN 200636-83-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5,16-bis(3-hydroxy-1-propynyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

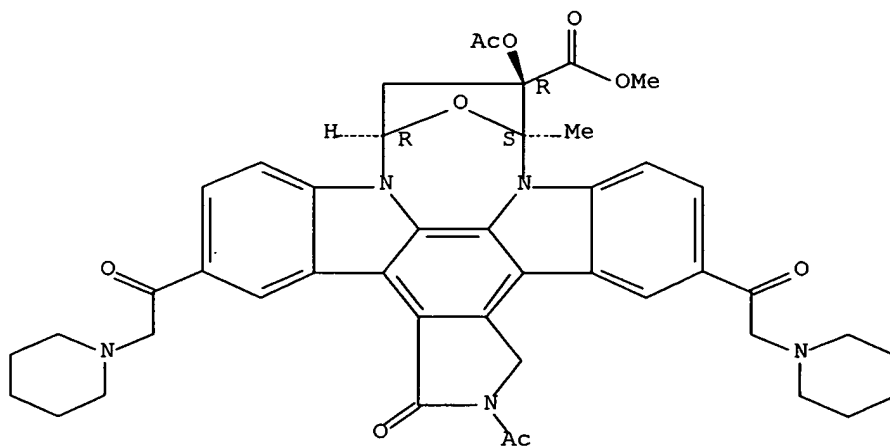
Absolute stereochemistry.



RN 200636-85-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5,16-bis[(1-piperidinyl)acetyl]-methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

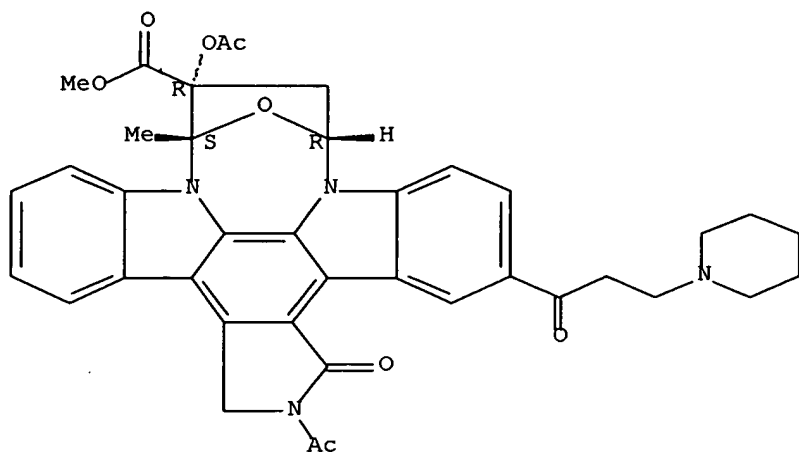
Absolute stereochemistry.



RN 200636-88-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[1-oxo-3-(1-piperidinyl)propyl]-methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

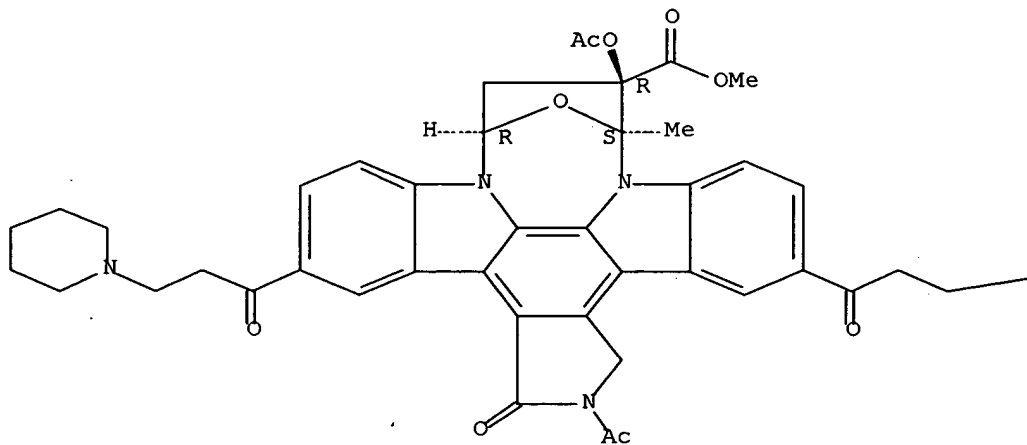
Absolute stereochemistry.

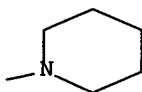


RN 200636-90-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5,16-bis[1-oxo-3-(1-piperidinyl)propyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

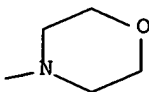
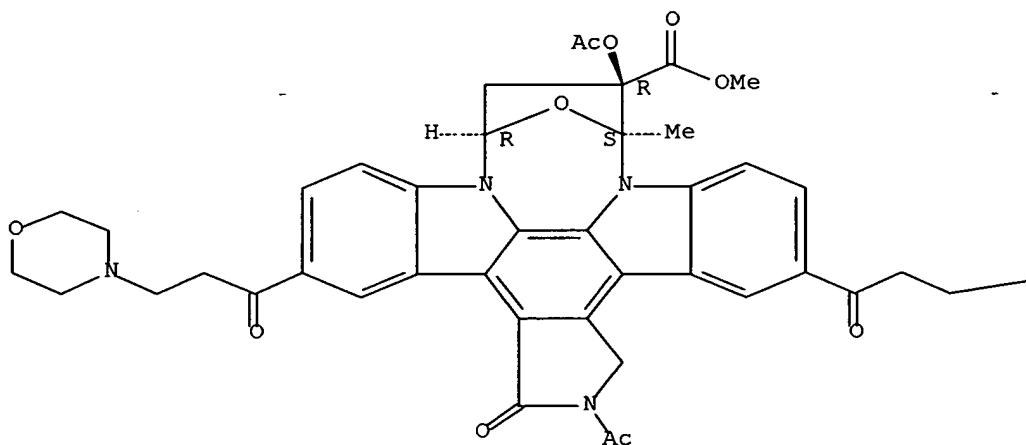
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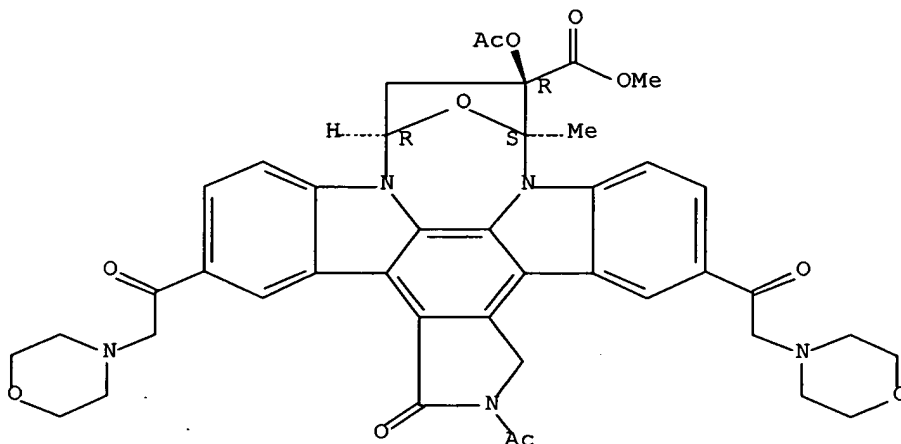
RN 200636-92-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-5,16-bis[3-(4-morpholinyl)-1-oxopropyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



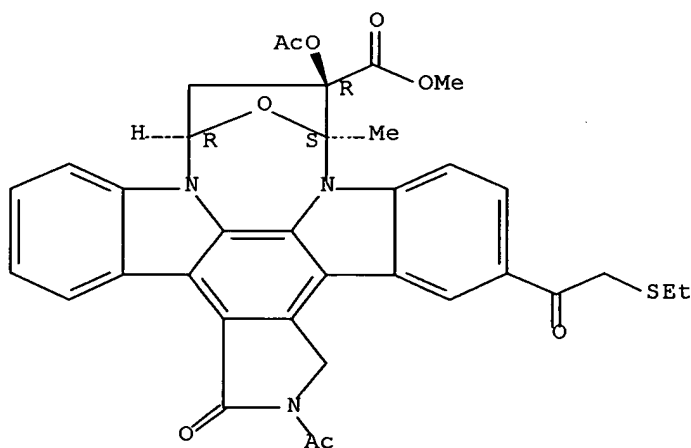
RN 200636-95-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-5,16-bis(4-morpholinylacetyl)-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



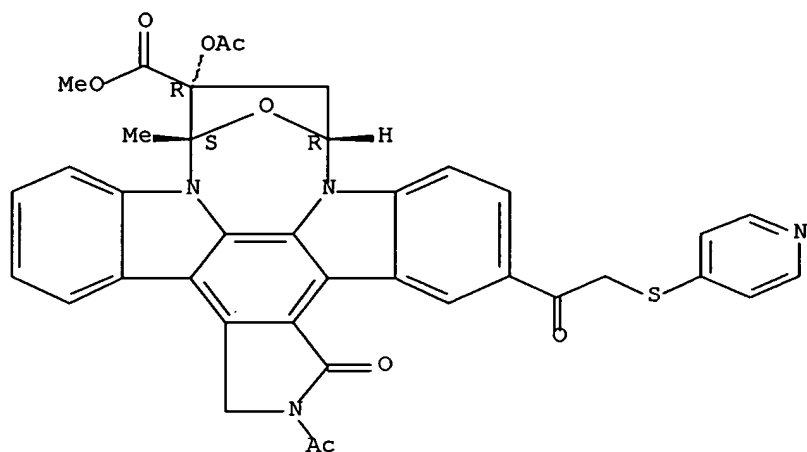
RN 200636-98-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-[(ethylthio)acetyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200637-00-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(4-pyridinylthio)acetyl]-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

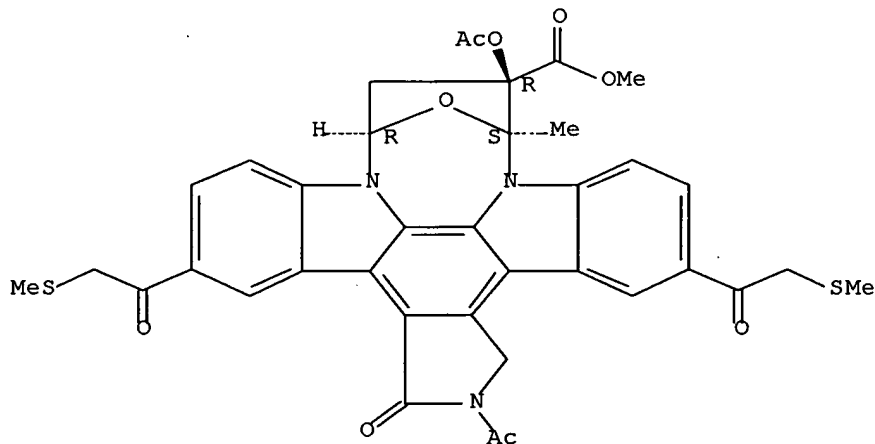
Absolute stereochemistry.



RN 200637-01-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-5,16-bis[(methylthio)acetyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

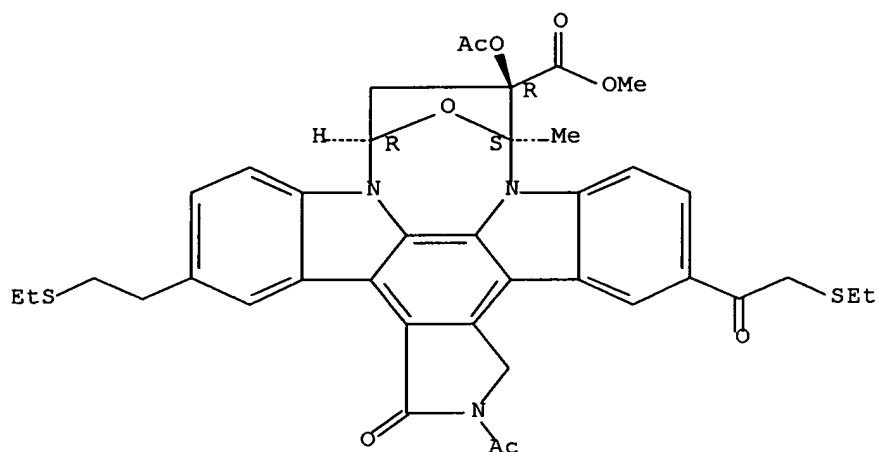
Absolute stereochemistry.



RN 200637-02-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-[(ethylthio)acetyl]-16-[2-(ethylthio)ethyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

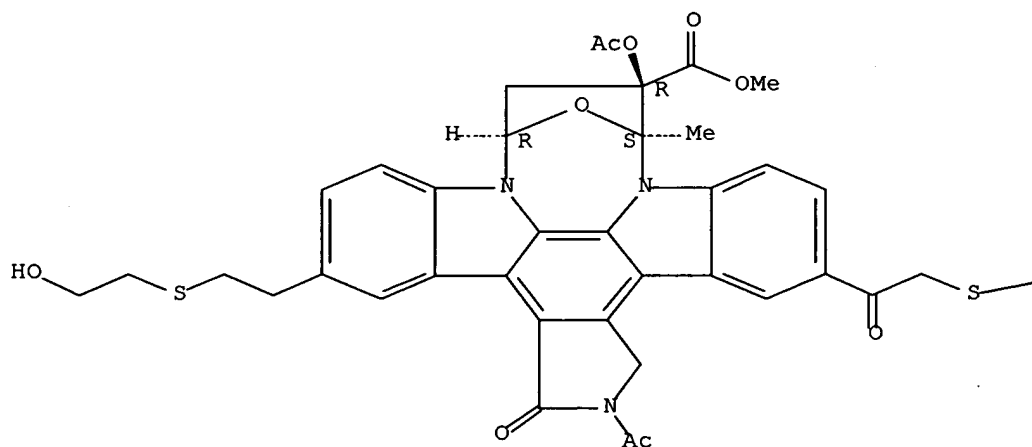


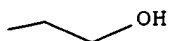
RN 200637-04-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5-[[(2-hydroxyethyl)thio]acetyl]-16-[2-[(2-hydroxyethyl)thio]ethyl]-9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

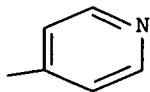
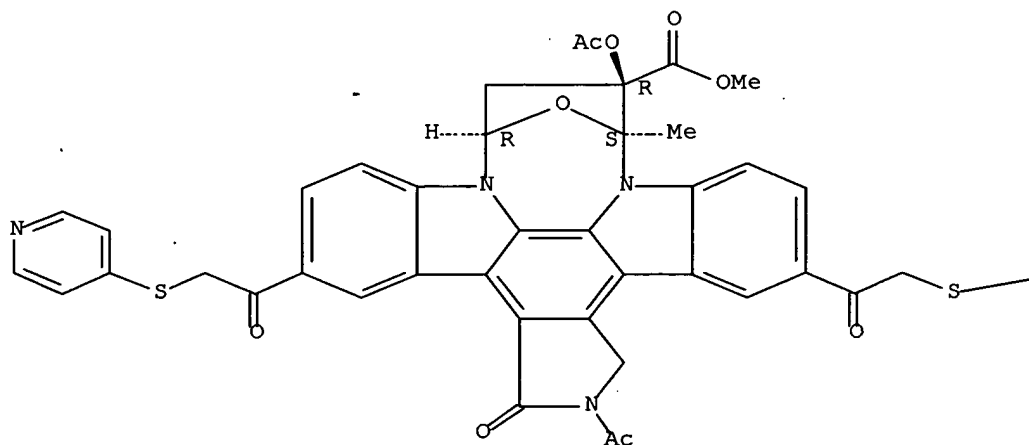
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RN 200637-05-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5,16-bis[(4-pyridinylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

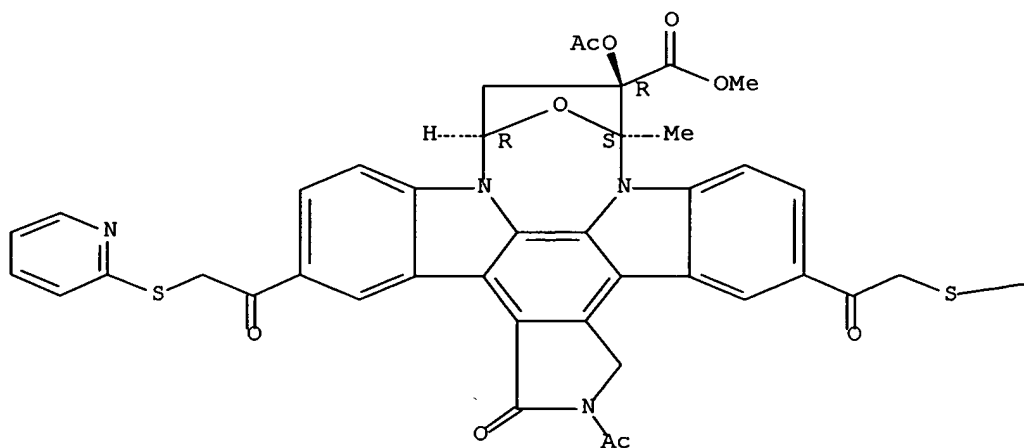
Absolute stereochemistry.



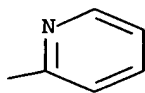
RN 200637-06-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5,16-bis[(2-pyridinylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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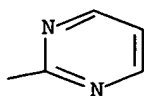
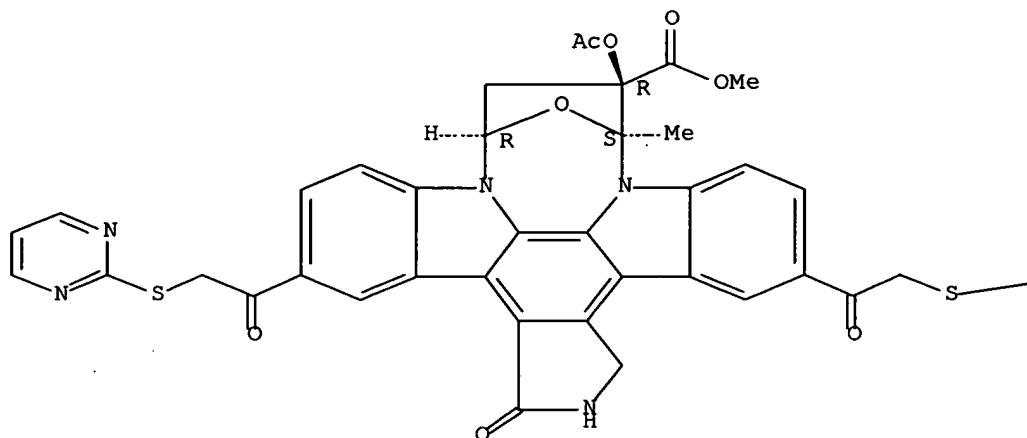


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RN 200637-07-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5,16-bis[(2-pyrimidinylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

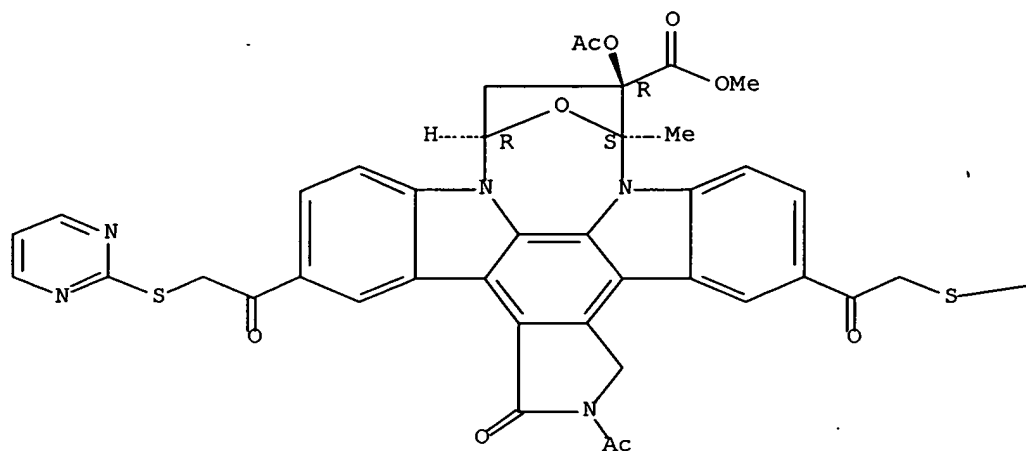
Absolute stereochemistry.



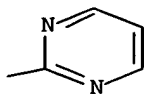
RN 200637-08-7 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5,16-bis[(2-pyrimidinylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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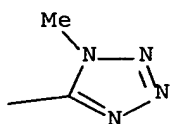
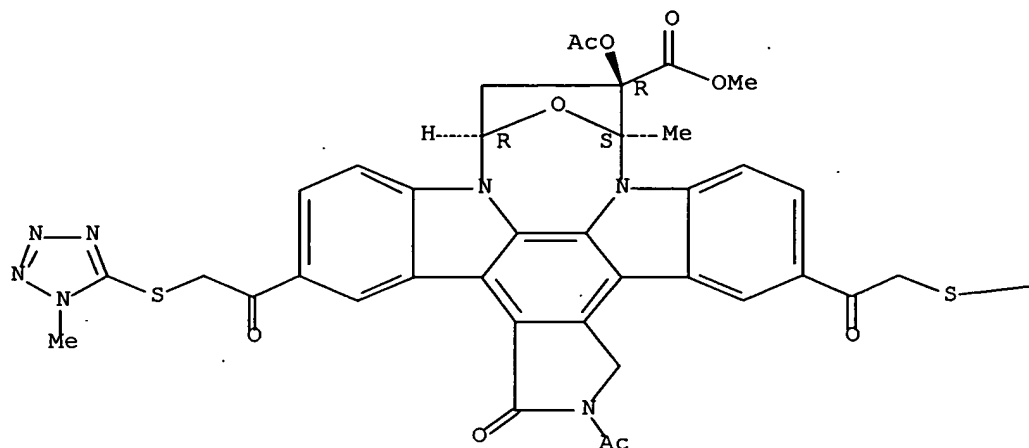


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RN 200637-09-8 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-5,16-bis[[1-methyl-1H-tetrazol-5-yl)thio]acetyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

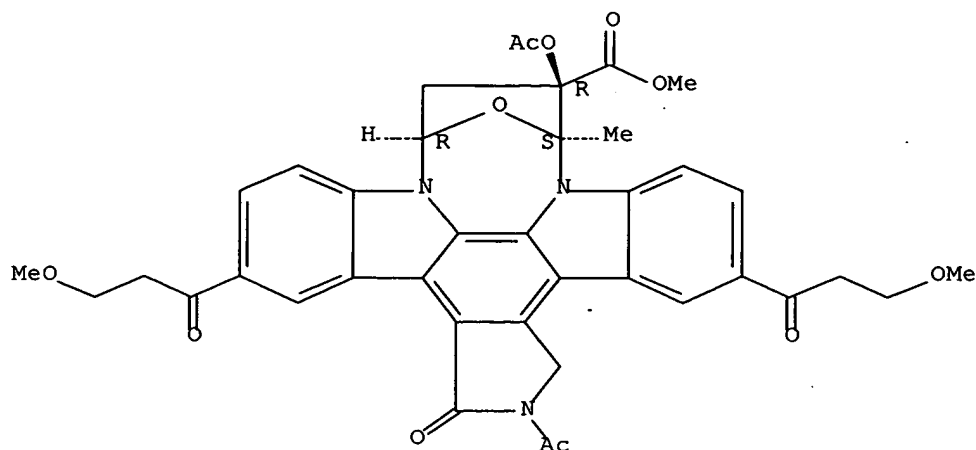
Absolute stereochemistry.



RN 200637-10-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5,16-bis(3-methoxy-1-oxopropyl)-9-methyl-1-oxo-methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

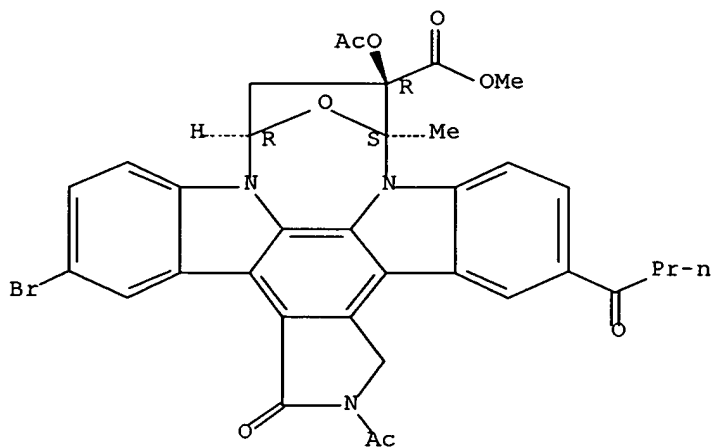


RN 200637-11-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-bromo-

2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5-(1-oxobutyl)-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



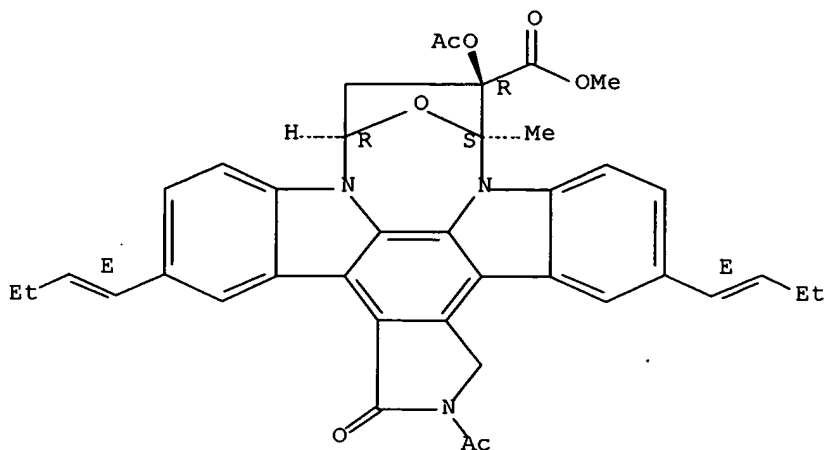
RN 200637-12-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-di-

2-butenyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, [9S-[5(E),9.alpha.,10.beta.,12.alpha.,16(E)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

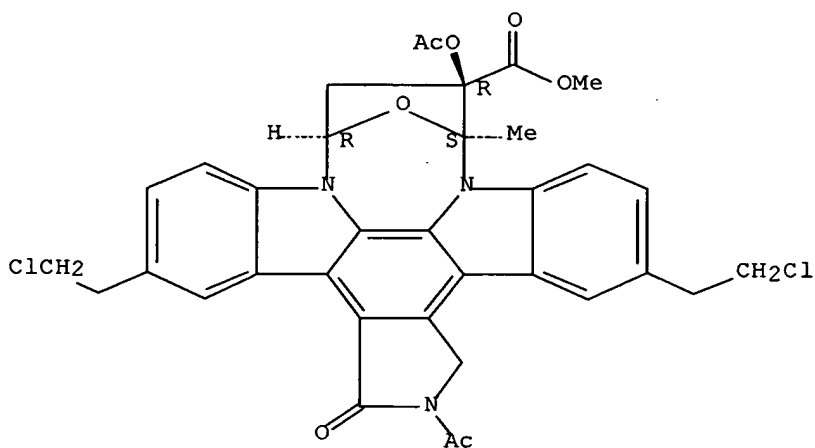
Double bond geometry as shown.



RN 200637-13-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis(2-chloroethyl)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester,
(9S,10R,12R)- (9CI) (CA INDEX NAME)

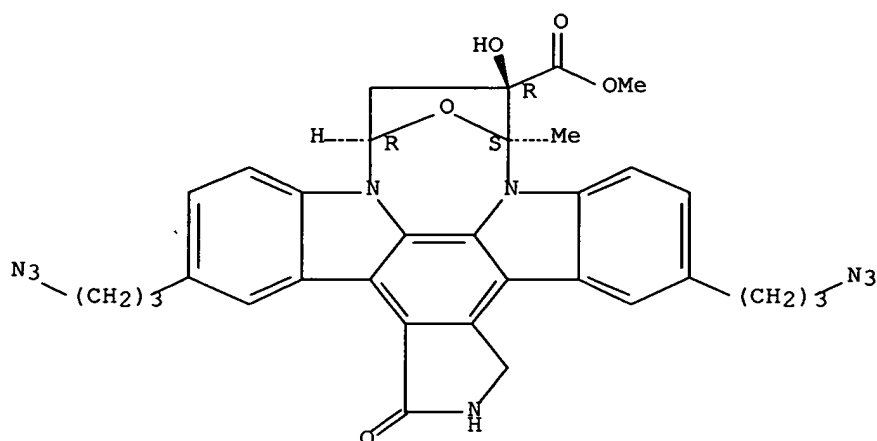
Absolute stereochemistry.



RN 200637-15-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis(3-azidopropyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
(9S,10R,12R)- (9CI) (CA INDEX NAME)

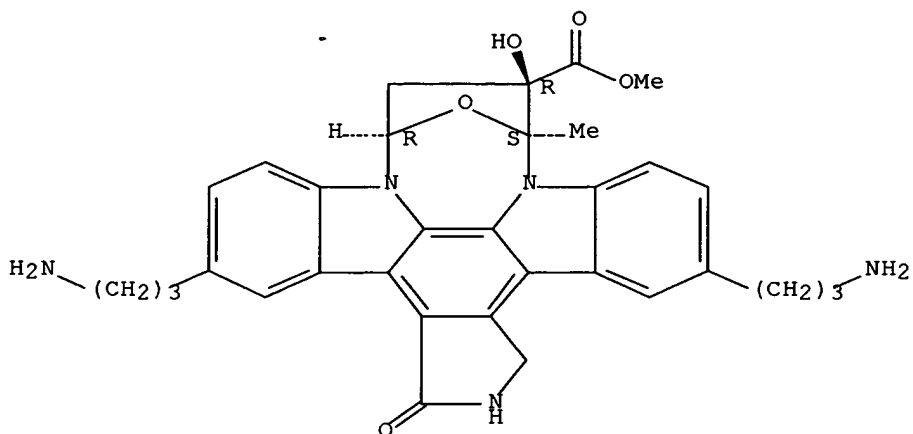
Absolute stereochemistry.



RN 200637-17-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis(3-aminopropyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

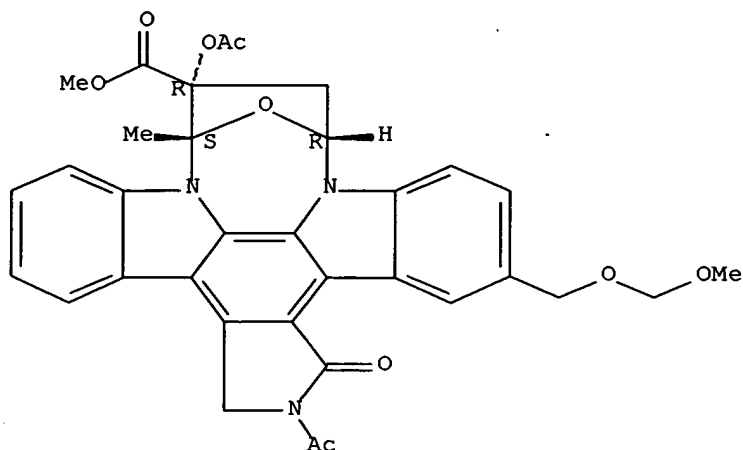
Absolute stereochemistry.



RN 200637-22-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-[(methoxymethoxy)methyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

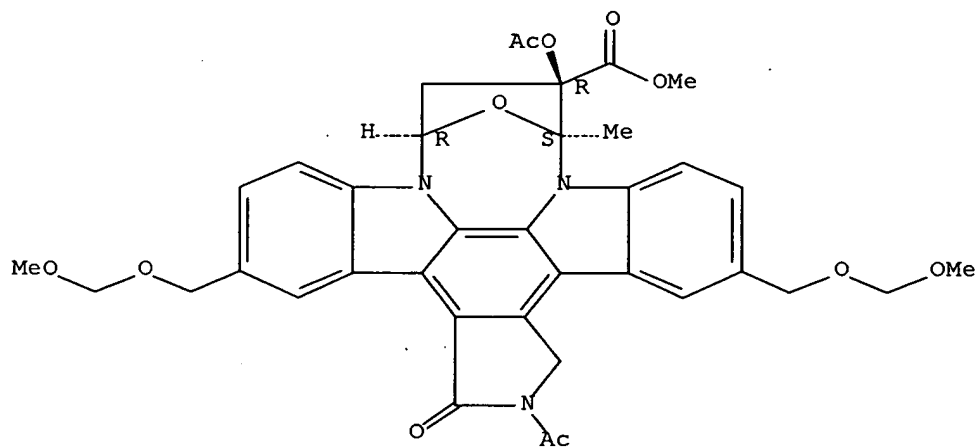
Absolute stereochemistry.



RN 200637-23-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5,16-bis[(methoxymethoxy)methyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

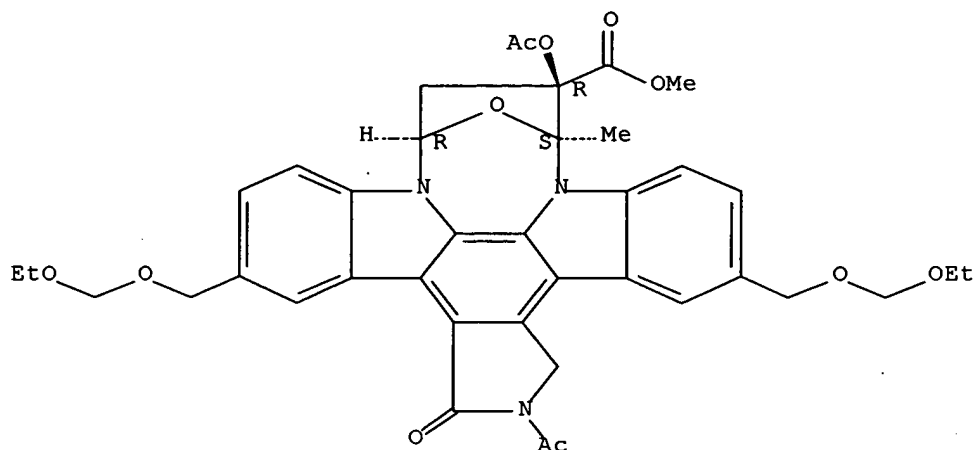
Absolute stereochemistry.



RN 200637-25-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis[(ethoxymethoxy)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

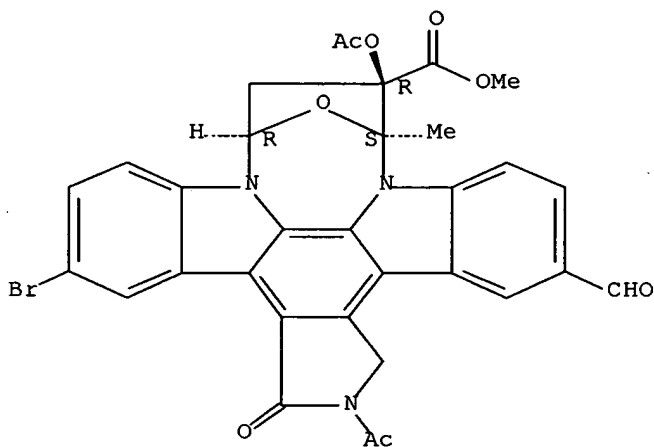
Absolute stereochemistry.



RN 200637-29-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-bromo-5-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

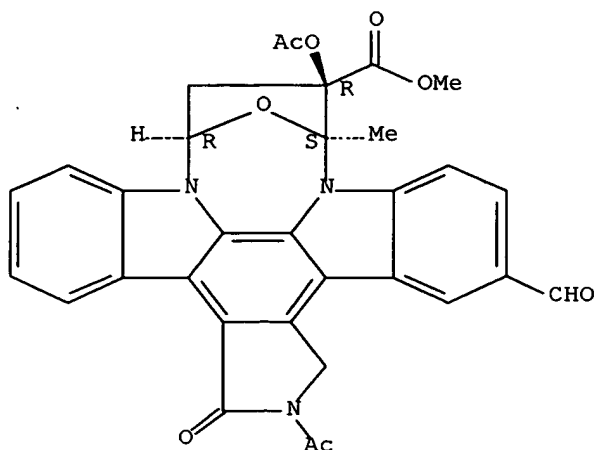
Absolute stereochemistry.



RN 200637-31-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

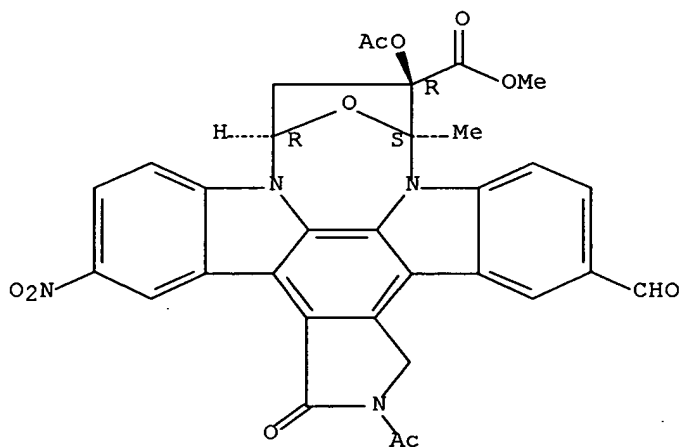


RN 200637-32-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-formyl-

2,3,9,10,11,12-hexahydro-9-methyl-16-nitro-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



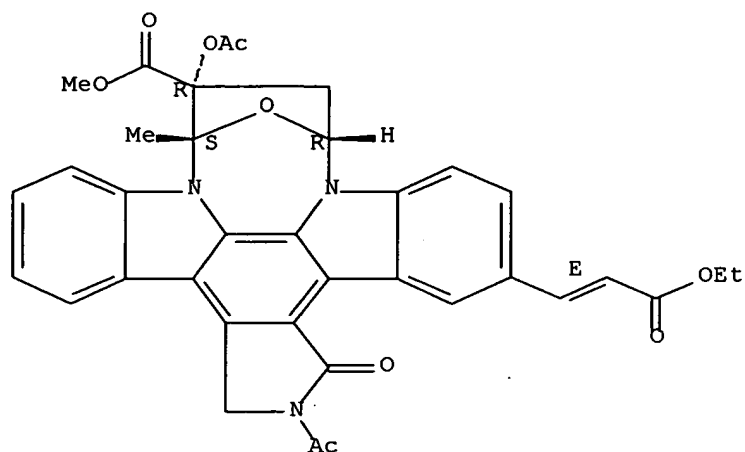
RN 200637-35-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(1E)-

3-ethoxy-3-oxo-1-propenyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

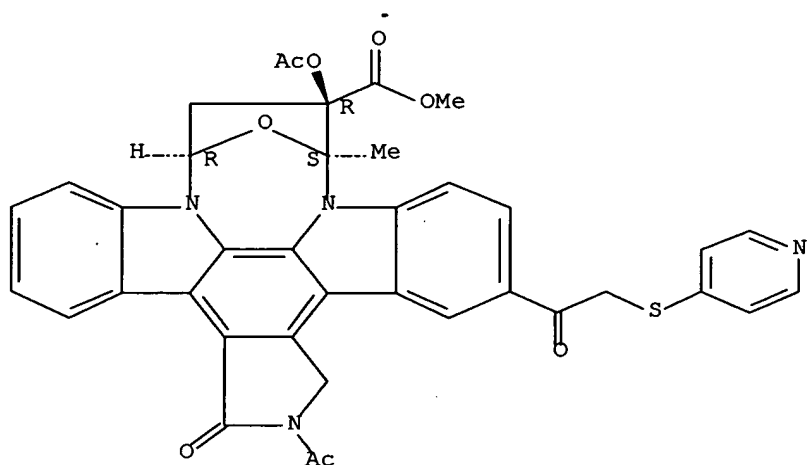
Double bond geometry as shown.



RN 200637-51-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5-[(4-pyridinylthio)acetyl]-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7: ANSWER 36 OF 54 CAPLUS COPYRIGHT 2003 ACS

AN 1997:667218 CAPLUS

DN 127:248345

TI Design and Implementation of an Efficient Synthetic Approach to
Furanosylated Indolocarbazoles: Total Synthesis of (+)- and (-)-K252a
AU Wood, John L.; Stoltz, Brian M.; Dietrich, Hans-Juergen; Pflum, Derek
A.;

Petsch, Dejah T.

CS Sterling Chemistry Laboratory Department of Chemistry, Yale University,
New Haven, CT, 06520-8107, USA

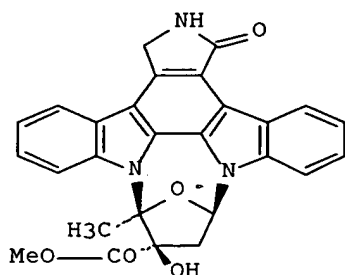
SO Journal of the American Chemical Society (1997), 119(41), 9641-9651
CODEN: JACSAT; ISSN: 0002-7863

PB American Chemical Society

DT Journal

LA English

GI



AB The first total prepn. of the nucleoside analog natural product (+)-
K252a

I has been achieved in 12 steps from com. available materials, with a
longest linear sequence of seven steps and an overall yield of 21% via
regio- and stereoselective cycloglycosidation reaction.

IT 195708-98-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

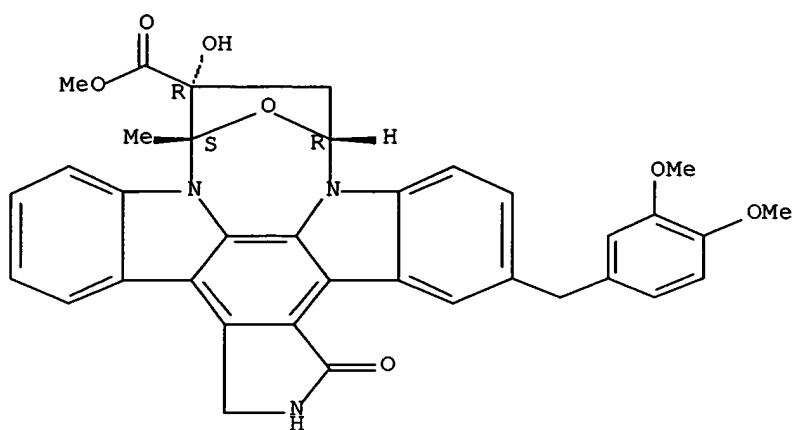
(total prepn. of furanosylated indolocarbazoles via regio- and
stereoselective cycloglycosidation)

RN 195708-98-6 CAPLUS

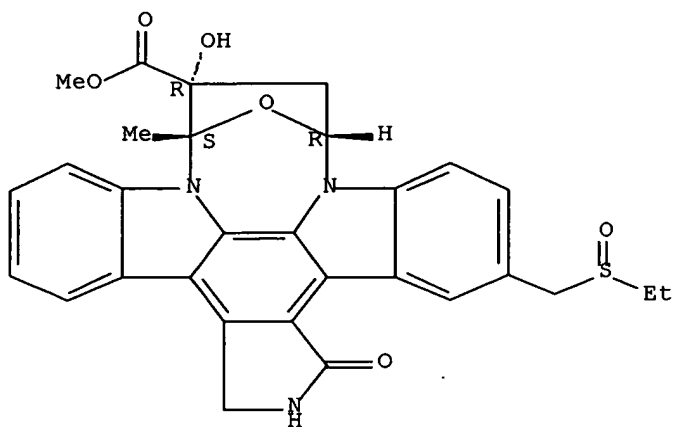
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
i][1,6]benzodiazocine-10-carboxylic acid, 16-[(3,4-
dimethoxyphenyl)methyl]-

2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
[9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L7 ANSWER 37 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1997:561613 CAPLUS
 DN 127:214733
 TI CEP-751 inhibits TRK receptor tyrosine kinase activity in vitro and exhibits anti-tumor activity
 AU Camoratto, Anna Marie; Jani, Jitesh P.; Angeles, Thelma S.; Maroney, Anna C.; Sanders, Christa Y.; Murakata, Chikara; Neff, Nicola T.; Vaught, Jeffry L.; Isaacs, John T.; Dionne, Craig A.
 CS Cephalon, Inc., West Chester, PA, 19380, USA
 SO International Journal of Cancer (1997), 72(4), 673-679
 CODEN: IJCNAB; ISSN: 0020-7136
 PB Wiley-Liss
 DT Journal
 LA English
 AB The present report describes the in vitro and in vivo profile of CEP-751, a novel receptor tyrosine kinase inhibitor. CEP-751 at 100 nM inhibits the receptor tyrosine kinase activity of the neurotrophin receptors trkA, trkB and trkC. CEP-751 has no effect on activity of receptors for EGF, IGF-1, insulin or on erbB2; inhibition of receptors for PDGF and bFGF was obsd. but occurred with lesser potency than inhibition of trk. CEP-751 exhibited anti-tumor efficacy against tumors derived from NIH3T3 cells transfected with trkA. Inhibition of trk phosphorylation could also be measured in these tumors, suggesting that anti-tumor efficacy of CEP-751 is related to inhibition of trk receptor tyrosine kinase activity. CEP-751 was found to be without effect when administered to nude mice bearing SK-OV-3 tumors, which overexpress erbB2 receptors, providing further evidence that inhibition of tumor growth may be related to inhibition of trk receptor tyrosine kinase activity. Our data indicate that CEP-751 is a potent trk inhibitor which possesses anti-tumor activity.
 IT **121664-90-2**
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (effect of K252a analogs on NGF-stimulated trk kinase activity)
 RN 121664-90-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfinyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)
 Absolute stereochemistry.



L7 ANSWER 38 OF 54 CAPLUS COPYRIGHT 2003 ACS

AN 1997:343249 CAPLUS

DN 127:62325

TI A radioactive binding assay for inhibitors of trkA kinase

AU Knight, Ernest, Jr.; Connors, Thomas J.; Maroney, Anna C.; Angeles, Thelma

S.; Hudkins, Robert L.; Dionne, Craig A.

CS Cephalon, Inc., West Chester, PA, 19380, USA

SO Analytical Biochemistry (1997), 247(2), 376-381

CODEN: ANBCA2; ISSN: 0003-2697

PB Academic

DT Journal

LA English

AB The high-affinity receptor for nerve growth factor (NGF), trkA, is a receptor-linked tyrosine kinase. The binding of NGF to trkA, depending

on

the context of its environment, can cause beneficial or deleterious responses in the target cells. For example, the activation of trkA in sympathetic and sensory neurons causes the subsequent survival and differentiation of these cells. The activation of trkA by NGF in other cells has been implicated in several pathologies including inflammation-induced hyperalgesia and several cancers. A radioactive binding assay to evaluate inhibitors of the kinase domain of trkA has

been

developed and validated. The assay monitors the specific binding of an inhibitor of trkA kinase activity, the indolocarbazole K-252a, to the

trkA

receptor. [3H]K-252a binds with high affinity to one site on the cytoplasmic kinase domain of the trkA receptor. Binding is saturable

and

reversible with a dissociation constant (Kd) of 1.5 nM. The binding assay has been used in competition binding experiments to determine the inhibition constants.

for

other indolocarbazole compounds. The IC50 values for compounds obtained in

the

binding assay correlate very well with the IC50 values obtained in an ELISA for trkA tyrosine kinase activity.

IT 121665-11-0

RL: ARG (Analytical reagent use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)

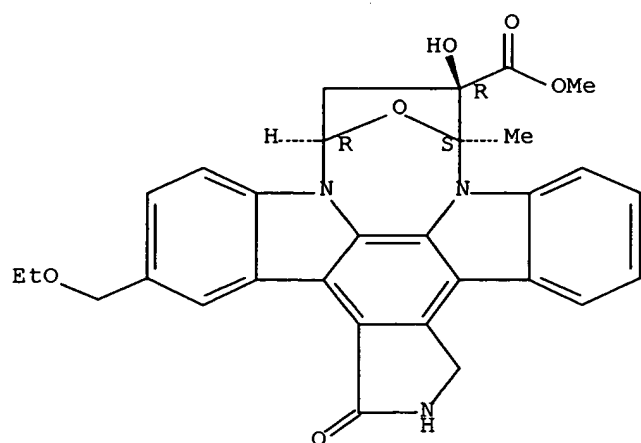
(radioactive binding assay for inhibitors of trkA kinase)

RN 121665-11-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-(ethoxymethyl)-2,3,9,10,11,12-

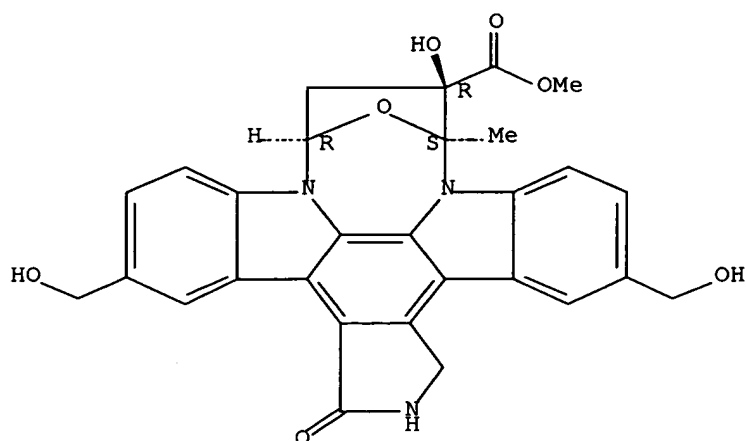
hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 39 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1997:318286 CAPLUS
 DN 127:262
 TI Neurotrophic 3,9-Bis[(alkylthio)methyl]- and -Bis(alkoxymethyl)-K-252a Derivatives
 AU Kaneko, Masami; Saito, Yutaka; Saito, Hiromitsu; Matsumoto, Tadashi; Matsuda, Yuzuru; Vaught, Jeffrey L.; Dionne, Craig A.; Angeles, Thelma S.;
 S.; Glicksman, Marcie A.; Neff, Nicola T.; Rotella, David P.; Kauer, James C.;
 C.; Mallamo, John P.; Hudkins, Robert L.; Murakata, Chikara
 CS Pharmaceutical Research Laboratories, Kyowa Hakko Kogyo Co. Ltd., Shizuoka, 411, Japan
 SO Journal of Medicinal Chemistry (1997), 40(12), 1863-1869
 CODEN: JMCMAR; ISSN: 0022-2623
 PB American Chemical Society
 DT Journal
 LA English
 AB A series of 3,9-disubstituted [(alkylthio)methyl]- and (alkoxymethyl)-K-252a derivs. was synthesized with the aim of enhancing and sepg. the neurotrophic properties from the undesirable NGF (trk A kinase) and PKC inhibitory activities of K-252a. Data from this series reveal that substitution in the 3- and 9-positions of K-252a with these groups reduces trk A kinase inhibitory properties approx. 100- to >500-fold while maintaining or in certain cases enhancing the neurotrophic activity. From this research, 3,9-bis[(ethylthio)methyl]-K-252a (8) was identified as a potent and selective neurotrophic agent in vitro as measured by enhancement of choline acetyltransferase activity in embryonic rat spinal cord and basal forebrain cultures. Compd. 8 was found to have weak kinase inhibitory activity for trk A, protein kinase C, protein kinase A, and myosin light chain kinase. On the basis of the in vitro profile, 8 was evaluated in in vivo models suggestive of neurol. diseases. Compd. 8 was active in preventing degeneration of cholinergic neurons of the nucleus basalis magnocellularis (NBM) and reduced developmentally programmed cell death (PCD) of female rat spinal nucleus of the bulbocavernosus motoneurons and embryonic chick lumbar motoneurons.
 IT **178404-44-9P**
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (intermediate; prepn. and neurotrophic activity of derivs. of indolocarbazole alkaloid K252a)
 RN 178404-44-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 121664-78-6P 156177-91-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

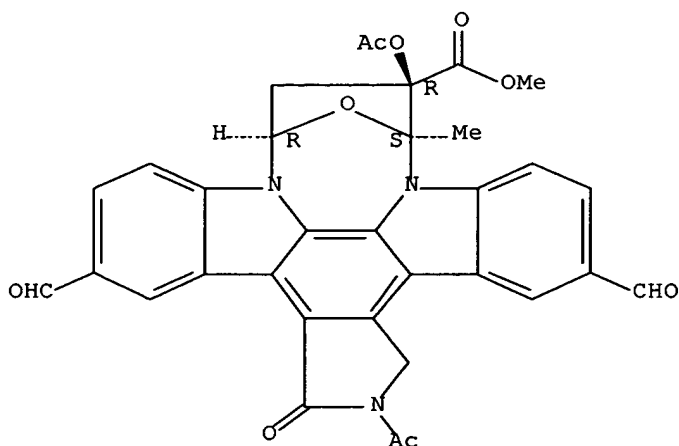
(Reactant or reagent)

(intermediate; prepn. and neurotrophic activity of derivs. of indolocarbazole alkaloid K252a)

RN 121664-78-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

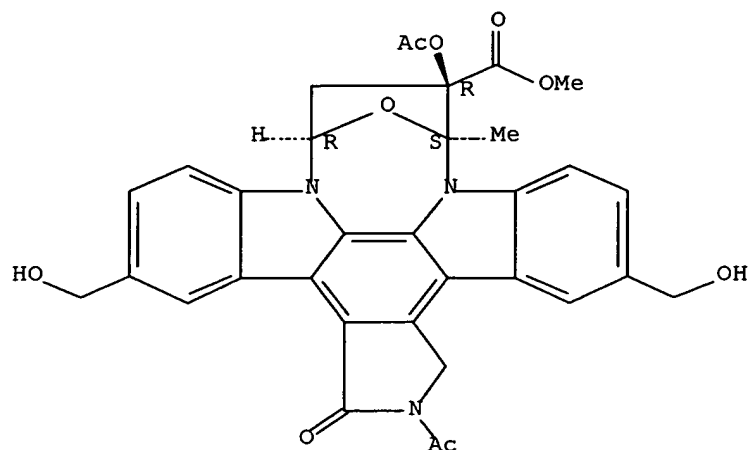
Absolute stereochemistry.



RN 156177-91-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 156177-65-0P 178404-45-0P 178404-52-9P
 178404-53-0P 178404-54-1P 178404-55-2P
 178404-56-3P 190319-45-0P

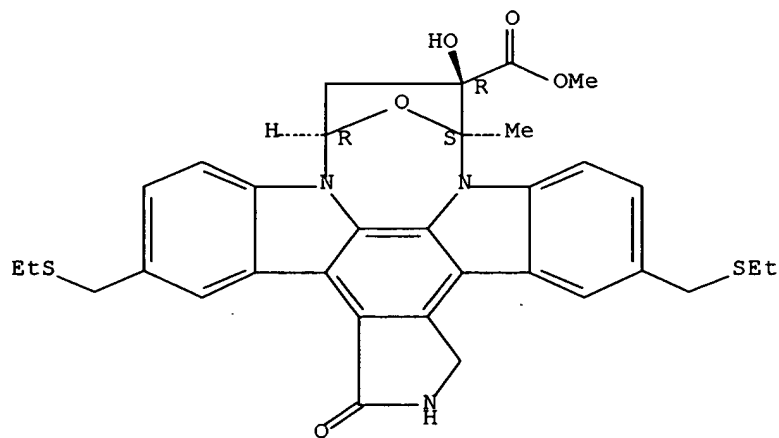
RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological
 study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
 use);

BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. and neurotrophic activity of derivs. of indolocarbazole
 alkaloid K252a)

RN 156177-65-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
 i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-
 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



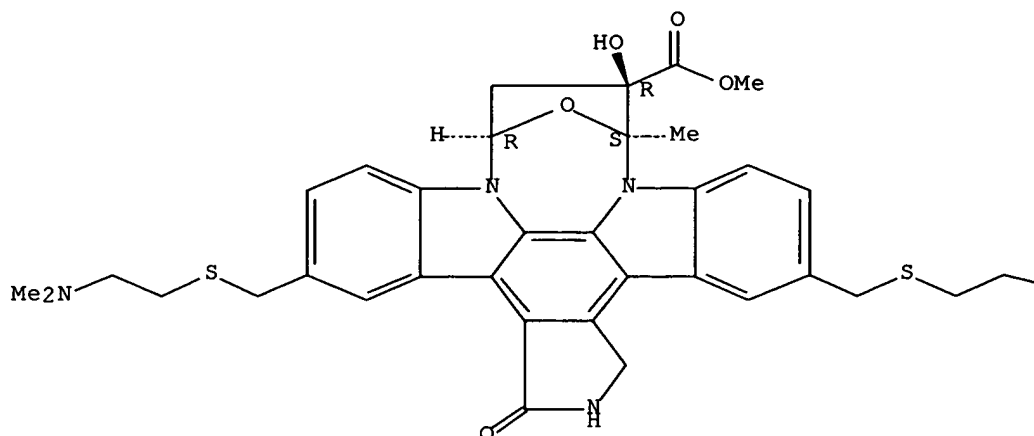
RN 178404-45-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
 i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[[[2-
 (dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-

methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



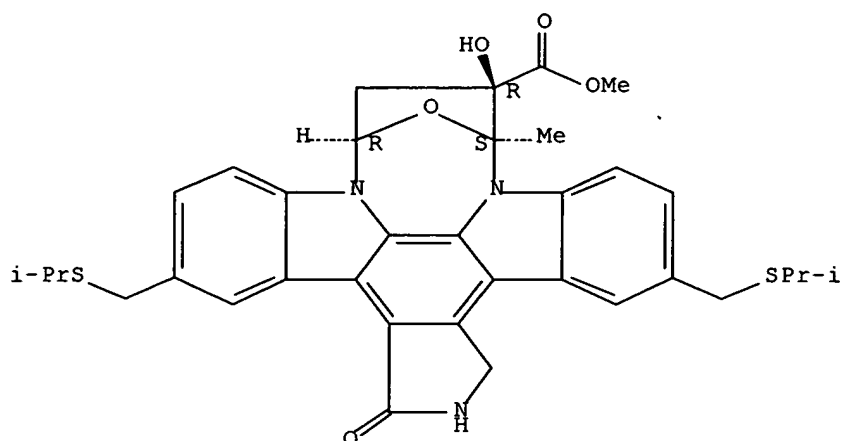
PAGE 1-B

—NMe2

RN 178404-52-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[[(1-methylethyl)thio]methyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

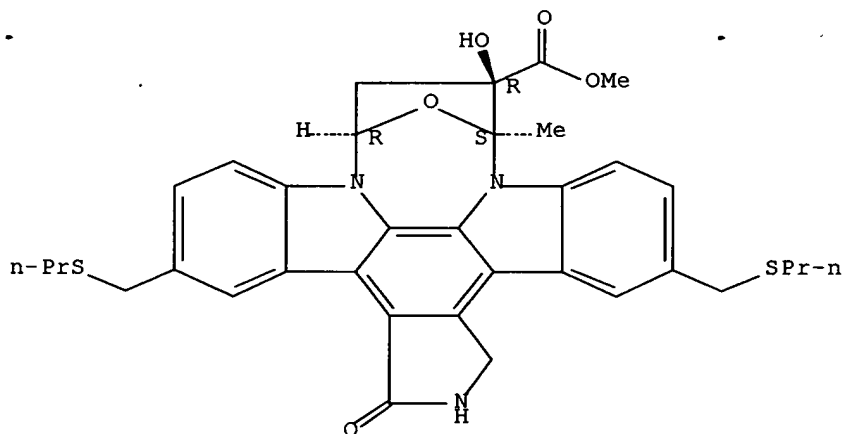
Absolute stereochemistry.



RN 178404-53-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(propylthio)methyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

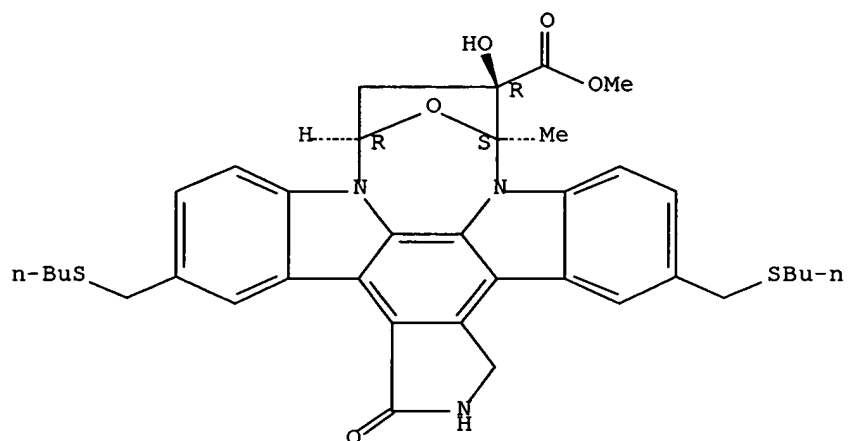
Absolute stereochemistry.



RN 178404-54-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(butylthio)methyl]-, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

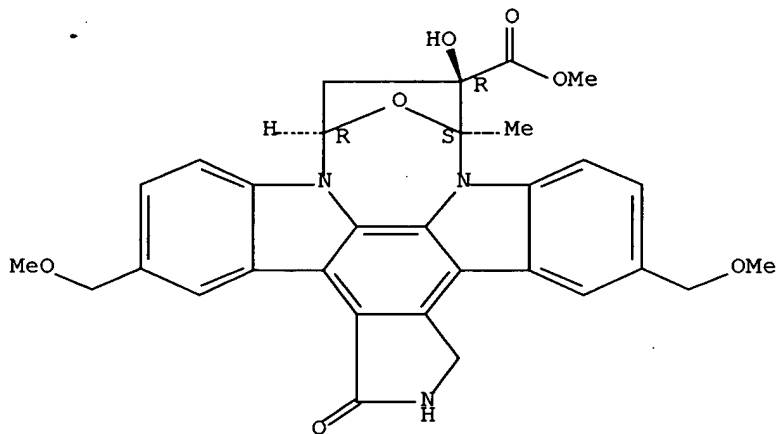
Absolute stereochemistry.



RN 178404-55-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(methoxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

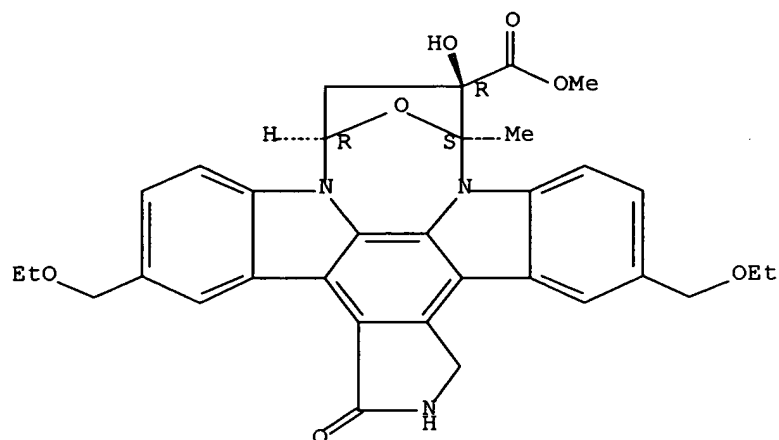
Absolute stereochemistry.



RN 178404-56-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

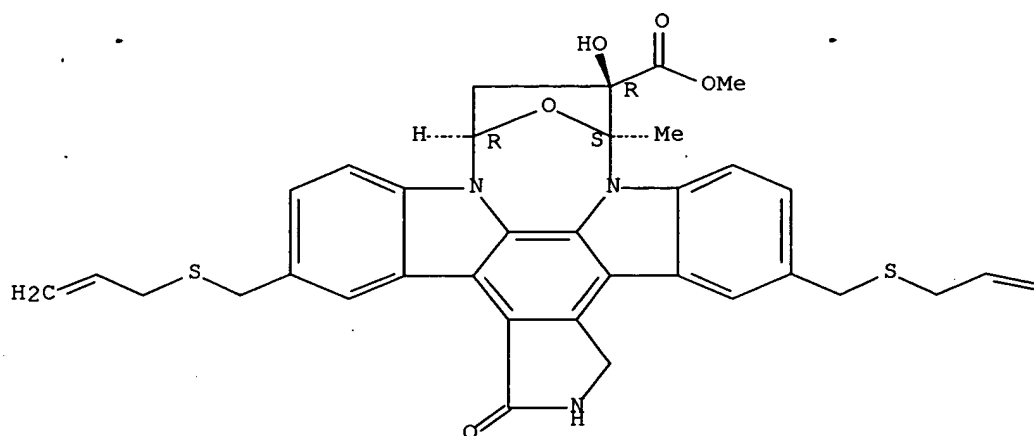
Absolute stereochemistry.



RN 190319-45-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(2-propenylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

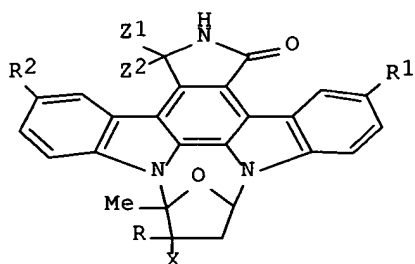


PAGE 1-B

=CH2

L7 ANSWER 40 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1997:276796 CAPLUS
 DN 126:343709
 TI Protein kinase inhibitors for treatment of neurological disorders
 IN Lewis, Michael E.; Kauer, James C.; Neff, Nicola; Roberts-Lewis, Jill;
 Murakata, Chikara; Saito, Hiromitsu; Matsuda, Yuzuru; Glicksman, Marcie
 A.; Kanai, Fumihiko; Kaneko, Masami
 PA Cephalon, Inc., USA; Kyowa Hakko Kogyo
 SO U.S., 60 pp., Cont.-in-part of U.S. 5,621,100.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | US 5621101 | A | 19970415 | US 1995-486739 | 19950607 |
| | US 5461146 | A | 19951024 | US 1993-96561 | 19930722 |
| | EP 768312 | A2 | 19970416 | EP 1996-116661 | 19930726 |
| | EP 768312 | A3 | 19970604 | | |
| | EP 768312 | B1 | 20000906 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| | EP 1002534 | A1 | 20000524 | EP 1999-120008 | 19930726 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE | | | | |
| | JP 2003113184 | A2 | 20030418 | JP 2002-244111 | 19930726 |
| | US 5621100 | A | 19970415 | US 1994-329540 | 19941026 |
| PRAI | US 1992-920102 | B2 | 19920724 | | |
| | US 1993-96561 | A2 | 19930722 | | |
| | US 1994-329540 | A2 | 19941026 | | |
| | EP 1993-917337 | A3 | 19930726 | | |
| | EP 1996-116661 | A3 | 19930726 | | |
| | JP 1994-504731 | A3 | 19930726 | | |
| OS | MARPAT 126:343709 | | | | |
| GI | | | | | |



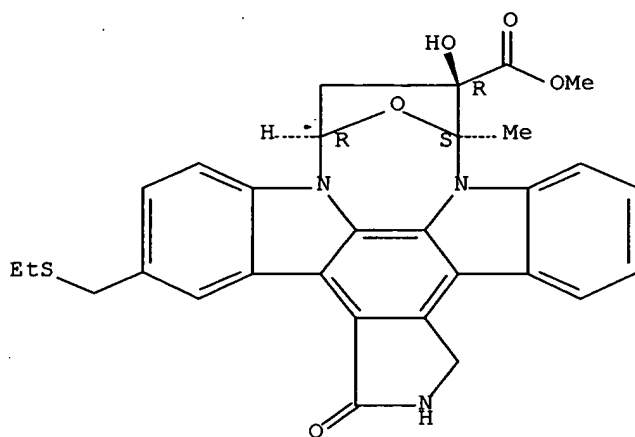
I

AB K-252a derivs., e.g. I [R = OH; R1 = H, CH2SO2Et, CH2SCH2CH2NH2,
 (1,3,5-triazol-1-yl)iminomethyl, CH2SCH2CH2NHBu, CH2CH2CH2NMe2, CH2NMe2,
 2-pyridylthiomethyl, 2-pyrimidinylthiomethyl, 2-
 pyrimidinylsulfonmethyl;
 R2 = Z1 = Z2 = H; X = CH2NHCOCH(CH2OH)NHCbz-(S), CO2Me, CONH2], were
 prepd. as protein kinase inhibitors for treatment of neurol. disorders.

I

[R = OH, R1 = CH2SO2Et, R2 = Z1 = Z2 = H, X = CO2Me; (II)] was prepd.
 from
 I (R = OH, R1 = CH2SEt, R2 = Z1 = Z2 = H, X = CO2Me) via oxidn. with
 3-ClC6H4CO3H in CHCl3. II at 30 nM had an Ipsi/Contra ratio of 62 for
 cortical ChAT activity in NBM rats with lesions.
 IT **121664-89-9P**
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological
 study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT
 (Reactant or reagent); USES (Uses)
 (prepn. of K-252a derivs. as protein kinase inhibitors for treatment
 of
 neurol. disorders)
 RN 121664-89-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
 i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-
 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 118735-80-1P 121664-90-2P 121665-11-0P
 156177-61-6P 156177-65-0P 156177-66-1P
 156177-73-0P 156177-75-2P 156177-79-6P
 167371-04-2P 167371-05-3P 167371-06-4P
 167371-07-5P 167371-08-6P 167371-09-7P
 167371-10-0P 167371-11-1P 167371-12-2P
 167371-13-3P 167371-14-4P 167371-15-5P
 167371-16-6P 167371-17-7P 167371-18-8P
 178404-41-6P 178404-43-8P 178404-45-0P
 178404-47-2P 178404-52-9P 178404-53-0P
 178404-54-1P 178404-55-2P 178404-56-3P
 178404-63-2P 178404-64-3P 178404-65-4P
 178404-66-5P 178404-68-7P

RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological
 study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
 use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)

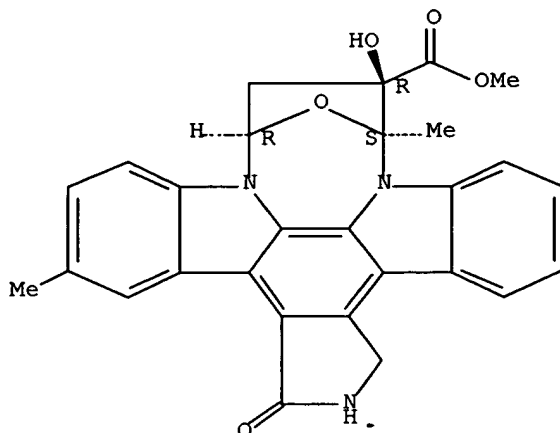
(prepn. of K-252a derivs. as protein kinase inhibitors for treatment
of
neurological disorders)

RN 118735-80-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-
hydroxy-9,16-dimethyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA

INDEX
NAME)

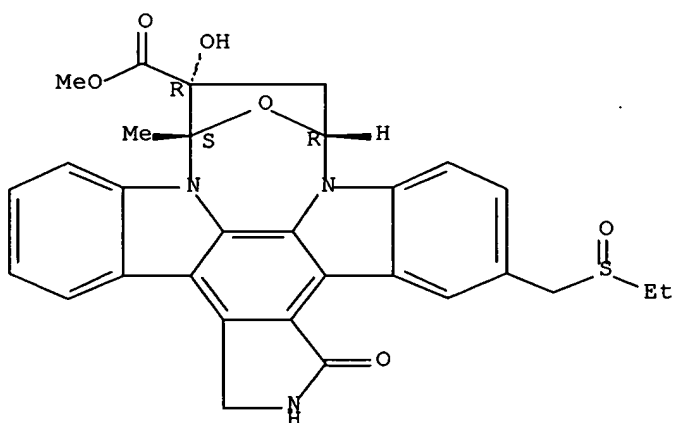
Absolute stereochemistry.



RN 121664-90-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfinyl)methyl]-
2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
(9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



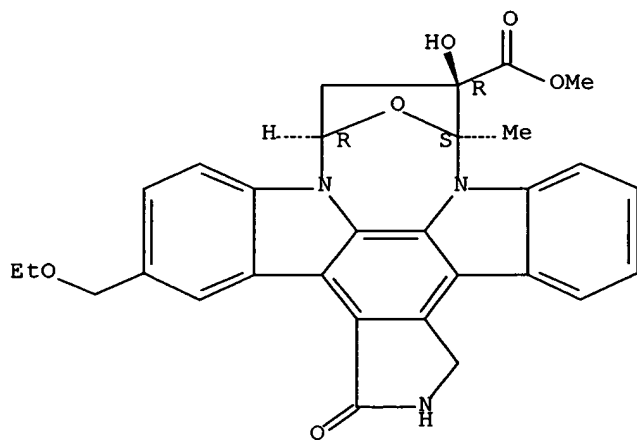
RN 121665-11-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
i][1,6]benzodiazocine-10-carboxylic acid, 16-(ethoxymethyl)-

2,3,9,10,11,12-

hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI)
(CA INDEX NAME)

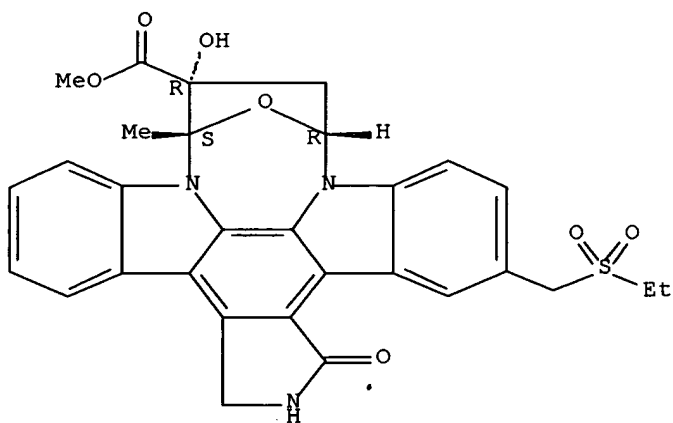
Absolute stereochemistry.



RN 156177-61-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfonyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

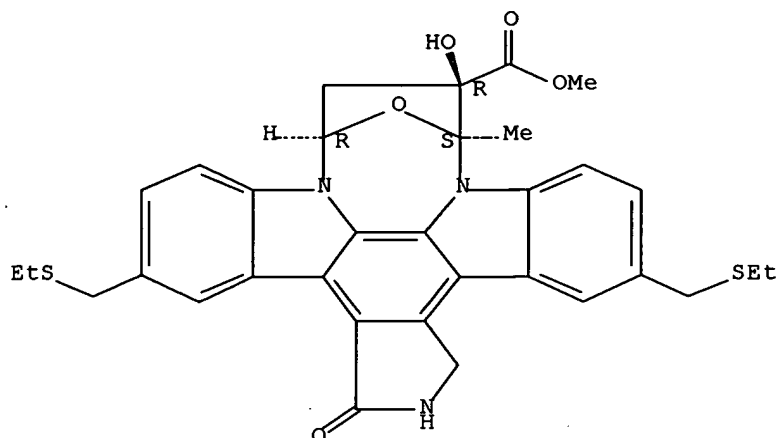
Absolute stereochemistry.



RN 156177-65-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

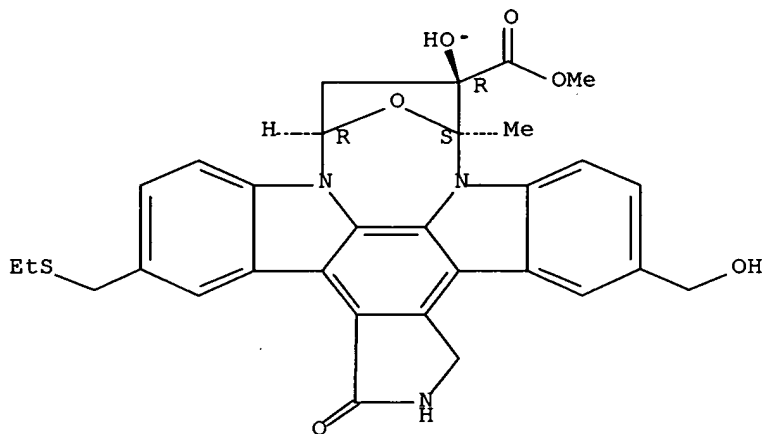
Absolute stereochemistry.



RN 156177-66-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

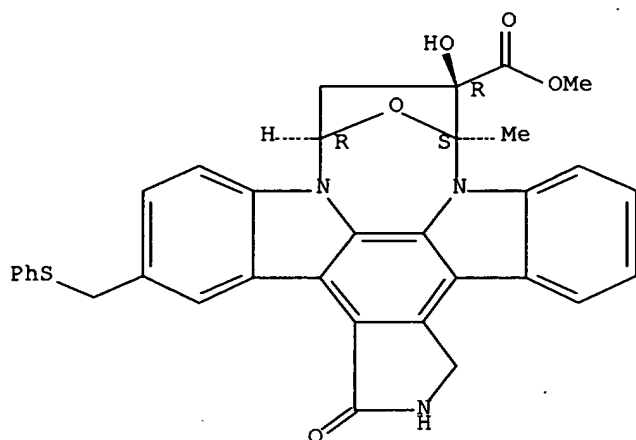
Absolute stereochemistry.



RN 156177-73-0 CAPLUS

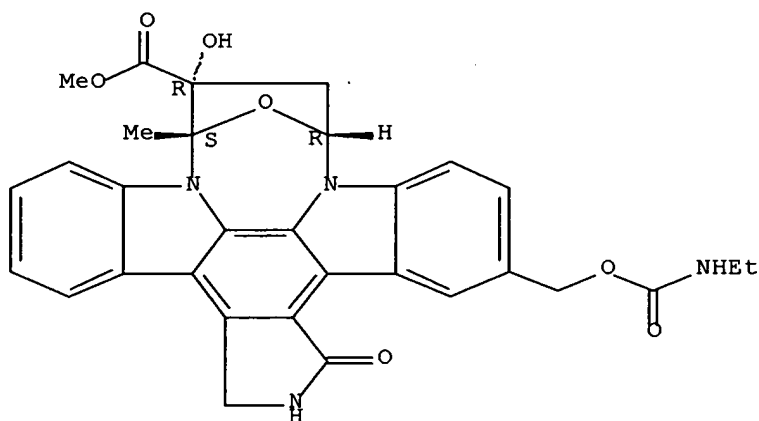
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(phenylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



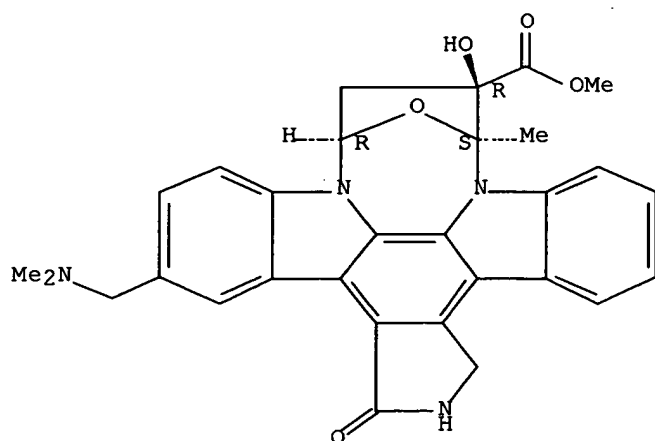
RN 156177-75-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[(ethylamino)carbonyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 156177-79-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(dimethylamino)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

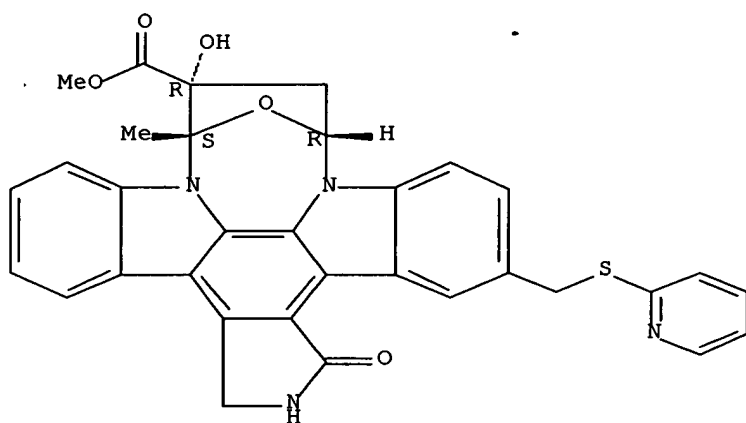
Absolute stereochemistry.



RN 167371-04-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyridinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

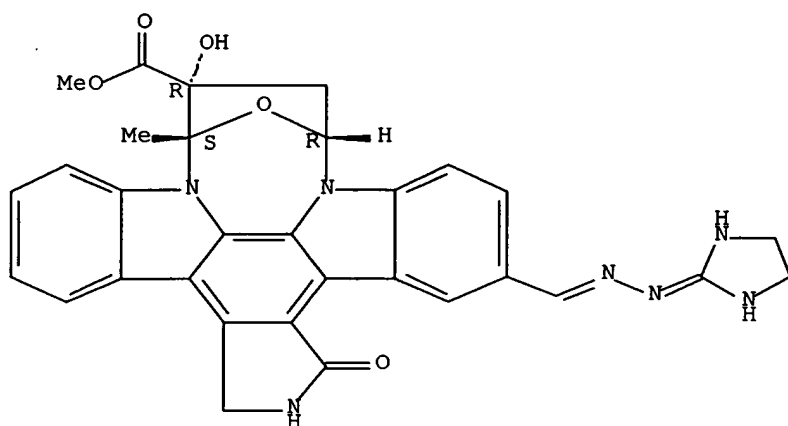


RN 167371-05-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[4,5-dihydro-1H-imidazol-2-yl)hydrazono]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

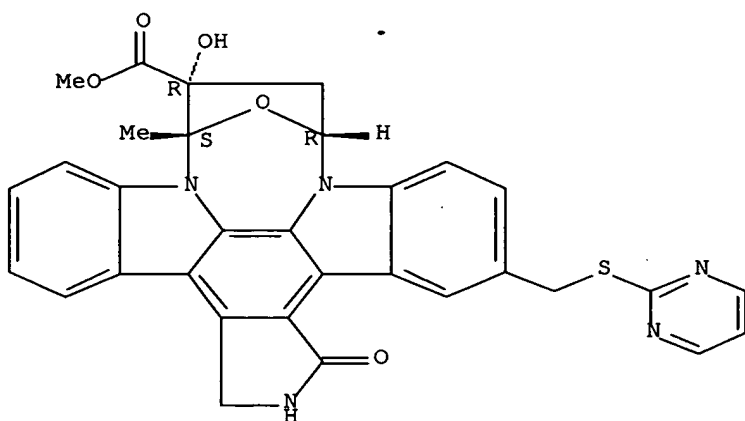
Double bond geometry unknown.



RN 167371-06-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyrimidinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

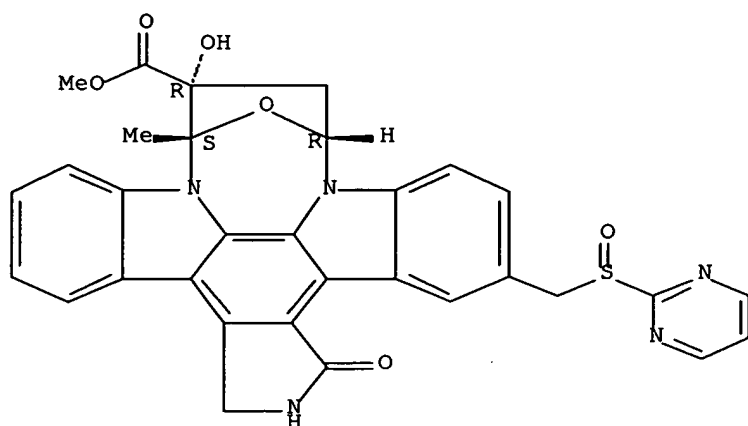
Absolute stereochemistry.



RN 167371-07-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyrimidinylsulfinyl)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

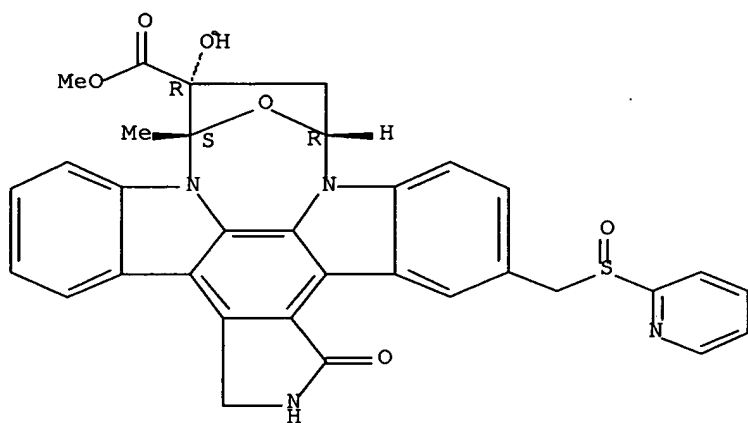
Absolute stereochemistry.



RN 167371-08-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyridinylsulfinyl)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

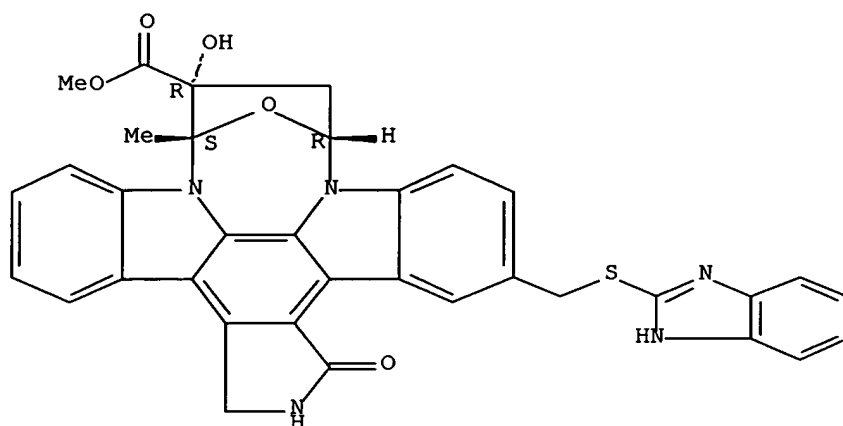
Absolute stereochemistry.



RN 167371-09-7 CAPLUS

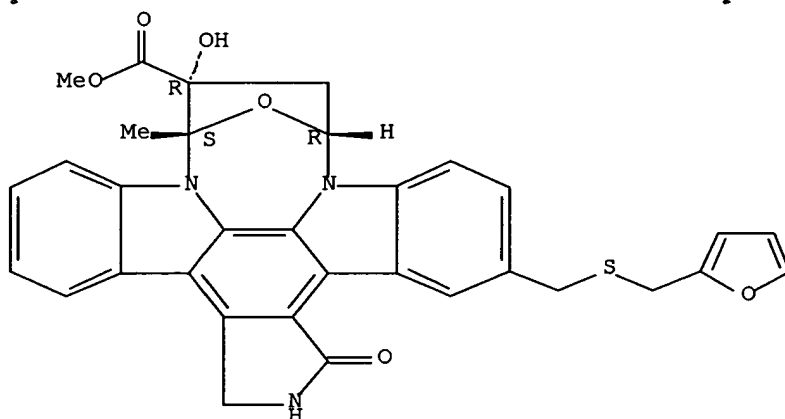
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(1H-benzimidazol-2-ylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



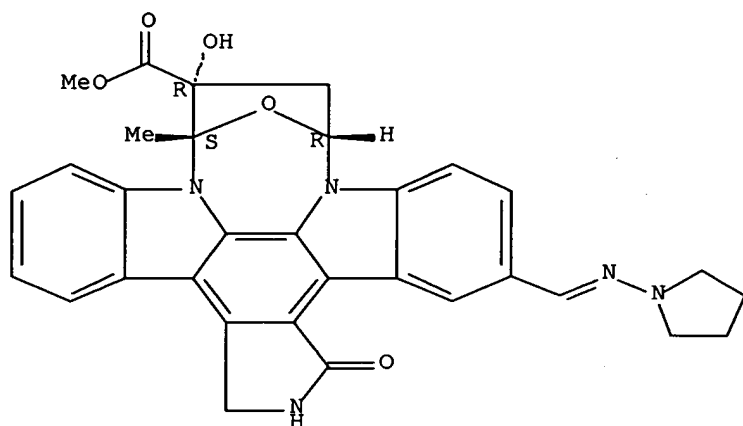
RN 167371-10-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(2-furanylmethyl)thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 167371-11-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1-pyrrolidinylimino)methyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.

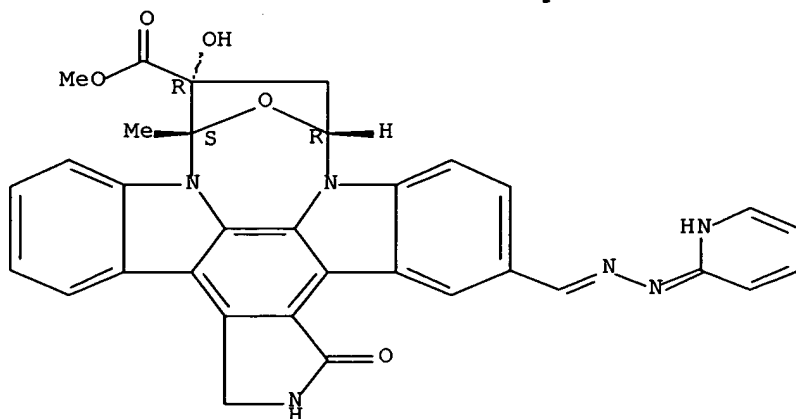


RN 167371-12-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyridinylhydrazono)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

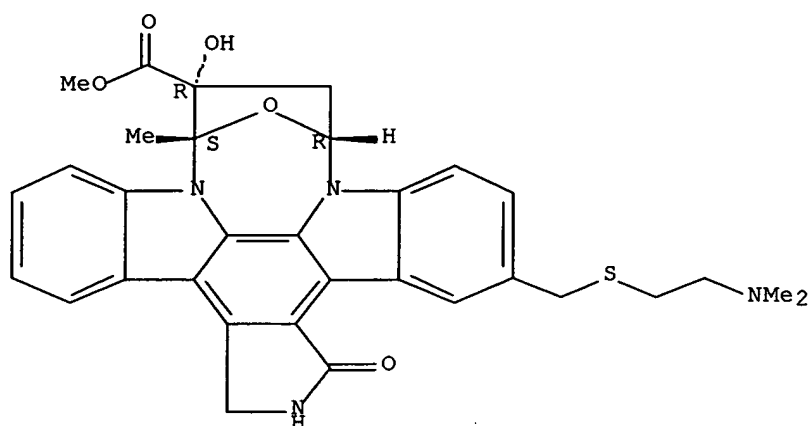
Double bond geometry unknown.



RN 167371-13-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

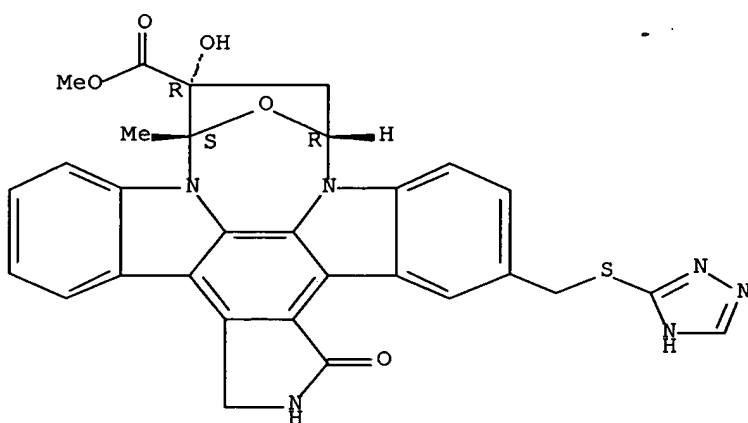
Absolute stereochemistry.



RN 167371-14-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1H-1,2,4-triazol-3-ylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

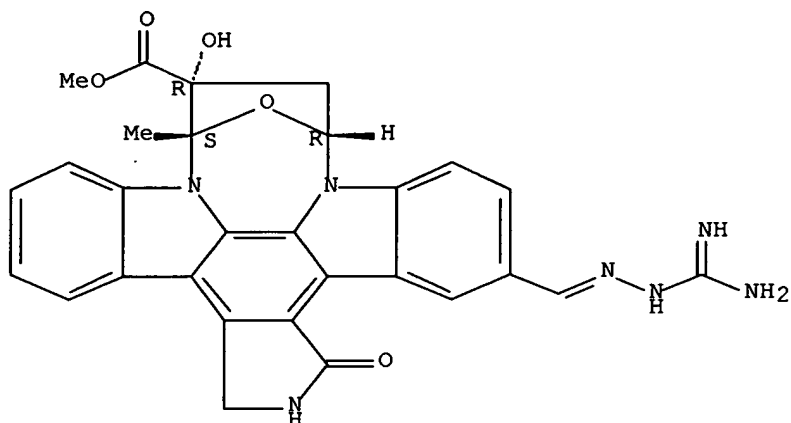


RN 167371-15-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[(aminoiminomethyl)hydrazono]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

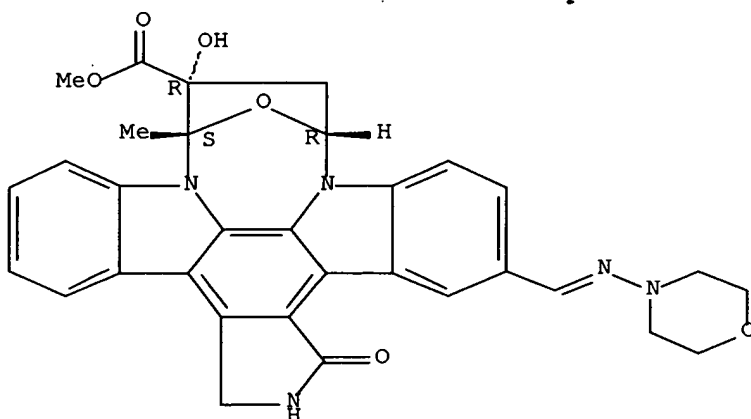


RN 167371-16-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-16-[(4-morpholinylimino)methyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

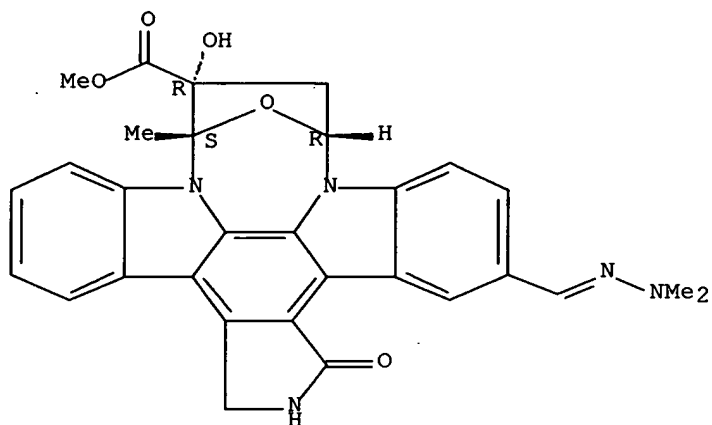


RN 167371-17-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(dimethylhydrazono)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

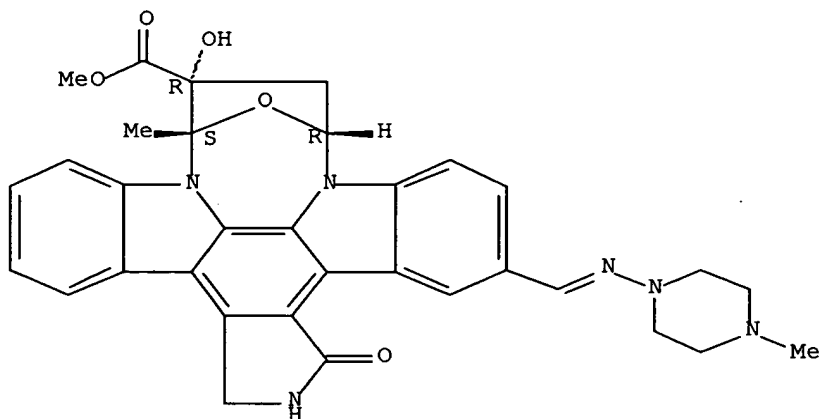
Absolute stereochemistry.

Double bond geometry unknown.



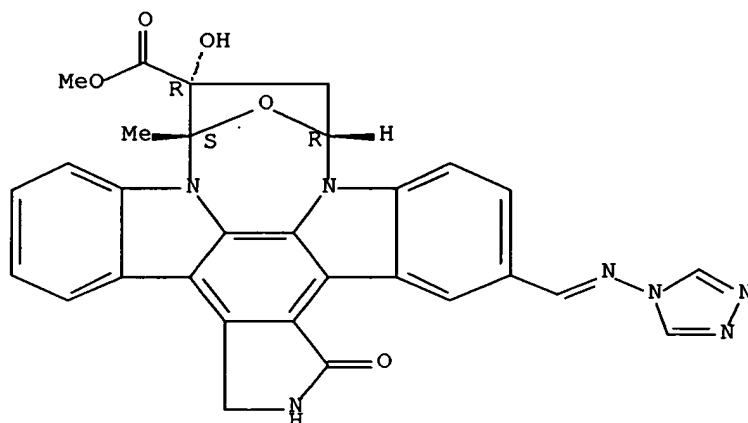
RN 167371-18-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-16-[(4-methyl-1-piperazinyl)imino]methyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.



RN 178404-41-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(4H-1,2,4-triazol-4-ylimino)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

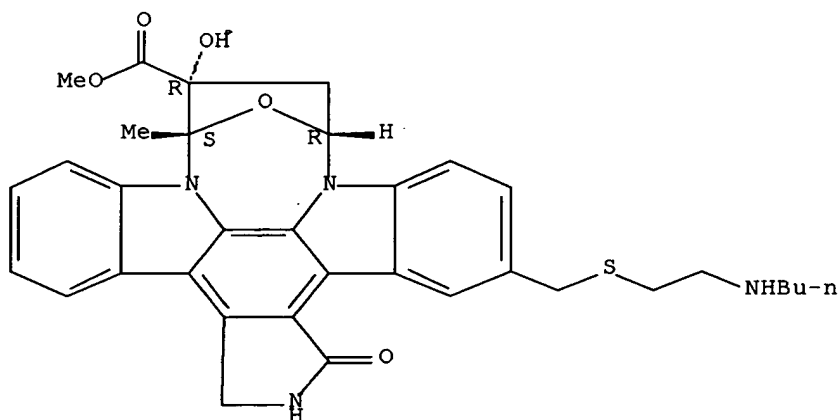
Absolute stereochemistry.
 Double bond geometry unknown.



RN 178404-43-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[2-(butylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

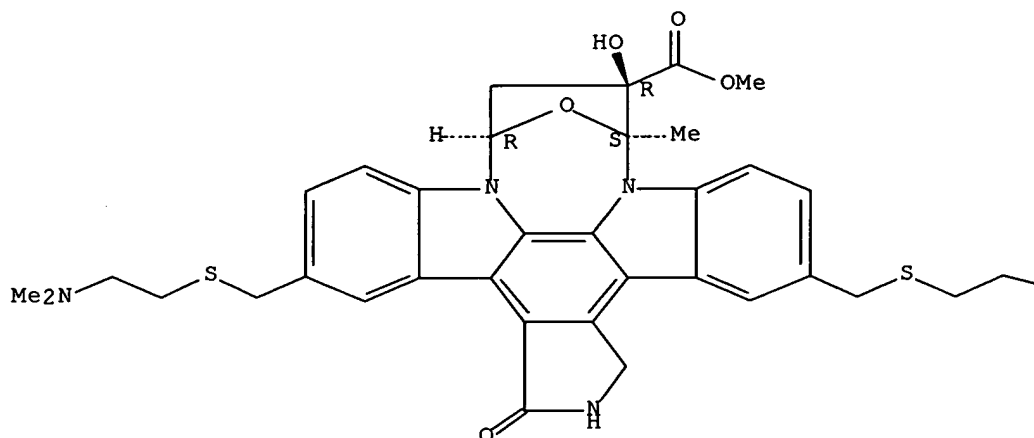
Absolute stereochemistry.



RN 178404-45-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

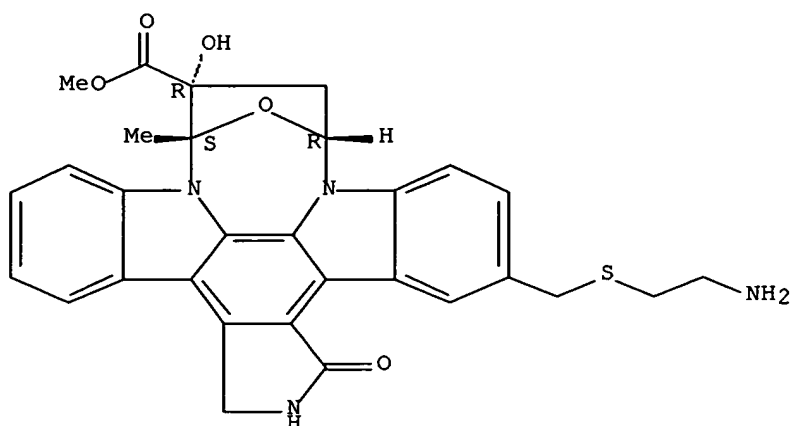


—NMe₂

RN 178404-47-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[2-aminoethyl)thio]methyl]-
2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
(9S,10R,12R)- (9CI) (CA INDEX NAME)

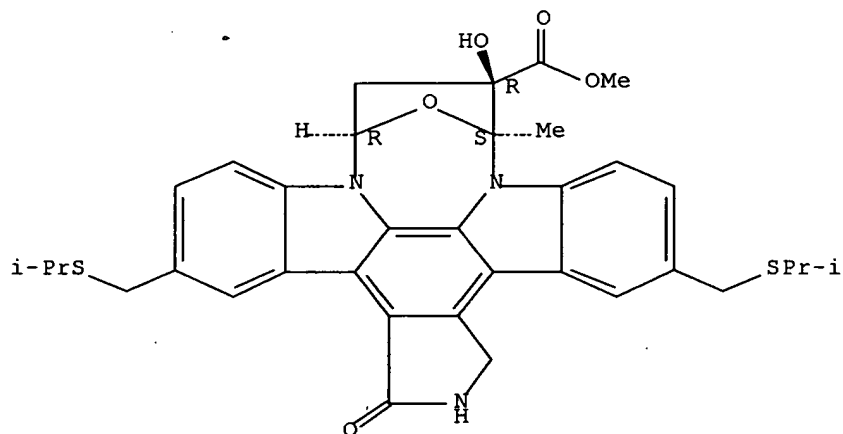
Absolute stereochemistry.



RN 178404-52-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[(1-methylethyl)thio]methyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

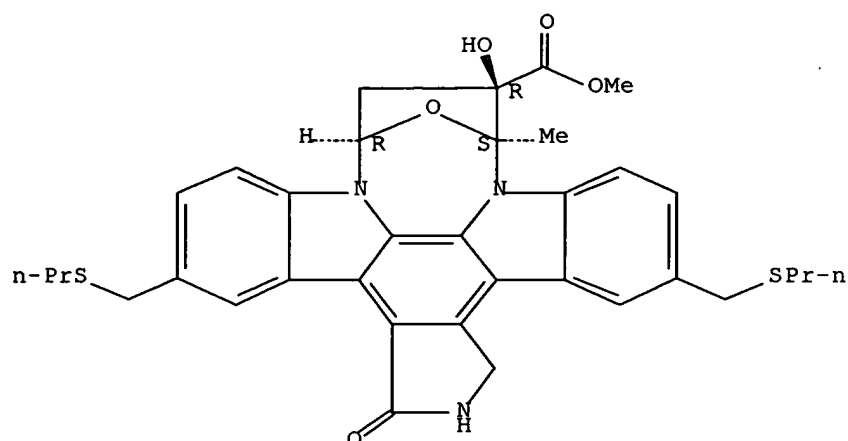
Absolute stereochemistry.



RN 178404-53-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(propylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

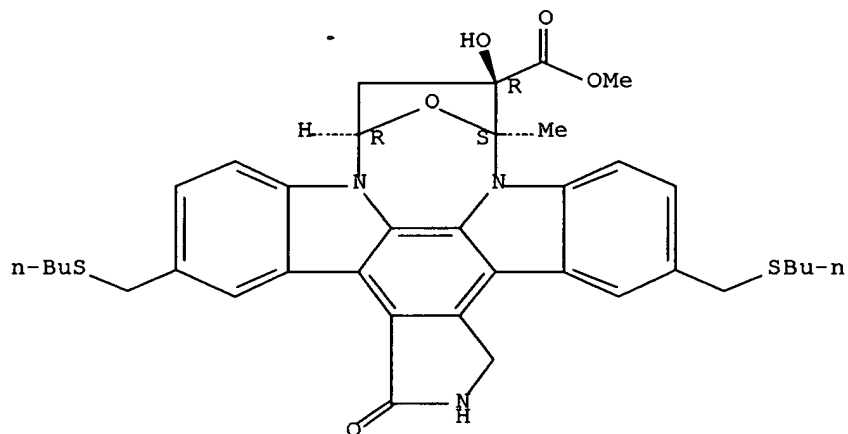
Absolute stereochemistry.



RN 178404-54-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(butylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

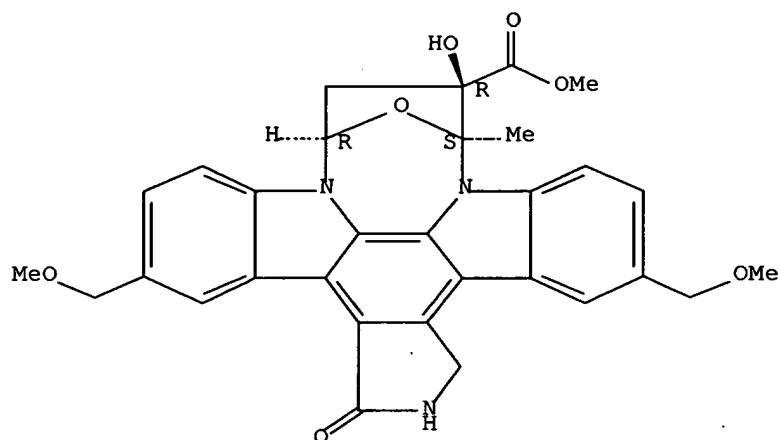
Absolute stereochemistry.



RN 178404-55-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(methoxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

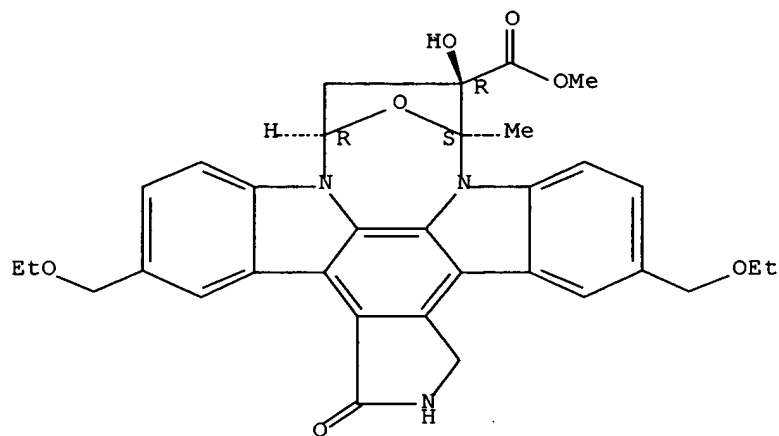
Absolute stereochemistry.



RN 178404-56-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

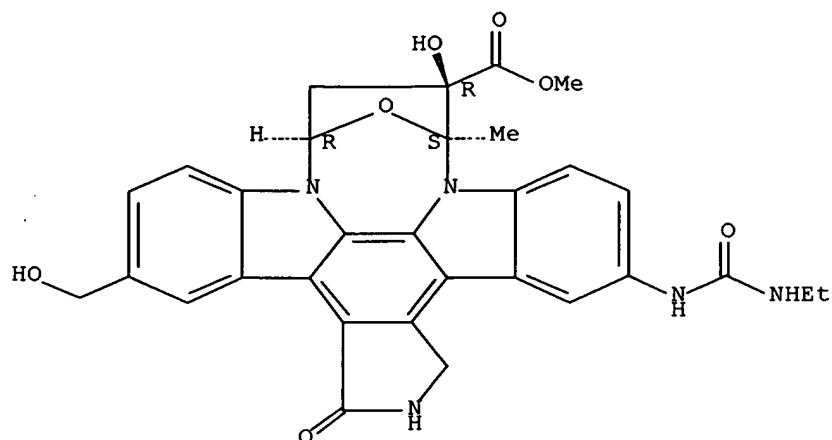
Absolute stereochemistry.



RN 178404-63-2 CAPLUS

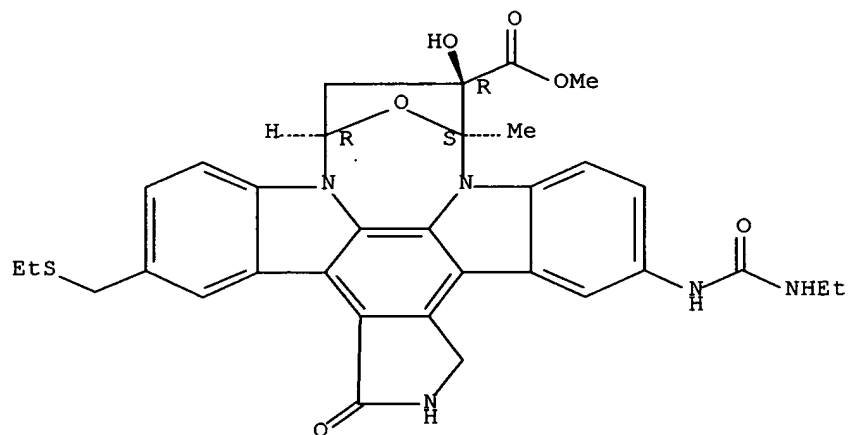
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[[(ethylamino) carbonyl] amino]-2,3,9,10,11,12-hexahydro-10-hydroxy-16- (hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



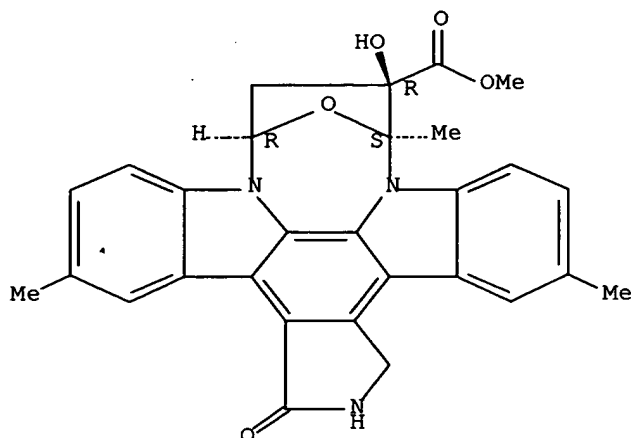
RN 178404-64-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[[(ethylamino) carbonyl] amino] -16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 178404-65-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,9,16-trimethyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

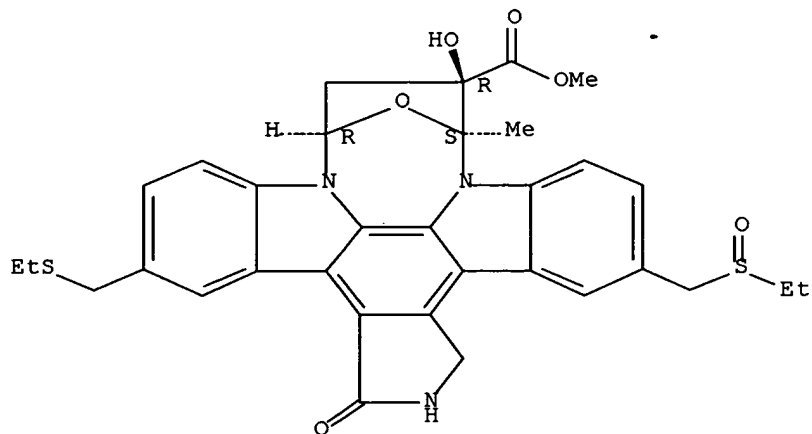
Absolute stereochemistry.



RN 178404-66-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[(ethylsulfinyl)methyl]-16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

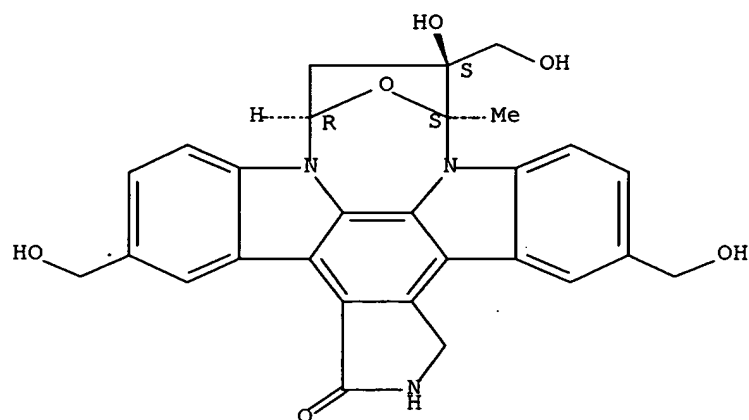
Absolute stereochemistry.



RN 178404-68-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocin-1-one, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,10,16-tris(hydroxymethyl)-9-methyl-, [9S-(9.alpha.,10.beta.,12.alpha.)]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 118777-59-6 118777-60-9 121664-78-6

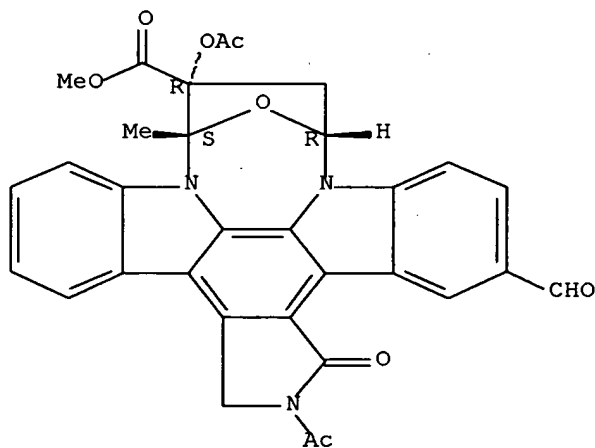
RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of K-252a derivs. as protein kinase inhibitors for treatment of
neurological disorders)

RN 118777-59-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

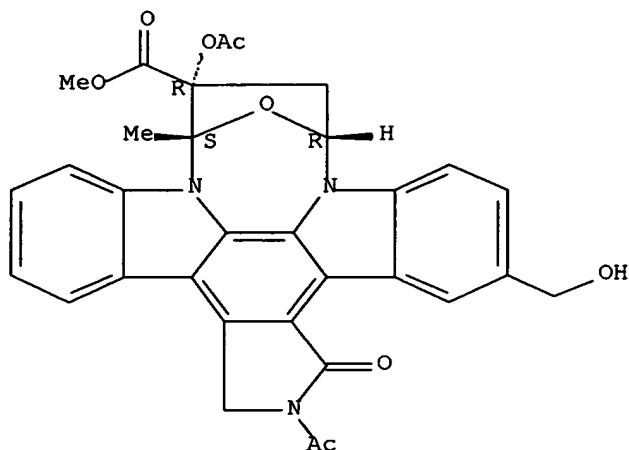
Absolute stereochemistry.



RN 118777-60-9 CAPLUS

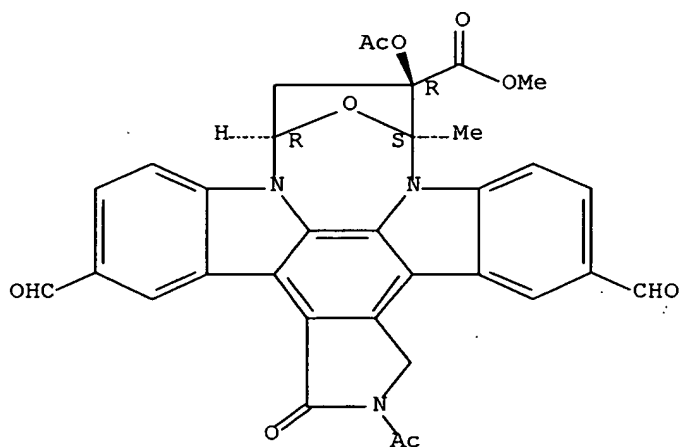
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 121664-78-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-diformyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 156177-91-2P 156177-93-4P 167370-76-5P
 167370-77-6P 167370-78-7P 167370-79-8P
 167370-80-1P 167370-81-2P 167370-82-3P
 167370-83-4P 167370-84-5P 167370-85-6P
 173829-96-4P 178404-40-5P 178404-42-7P
 178404-44-9P 178404-46-1P 178404-57-4P
 178404-61-0P 178404-62-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

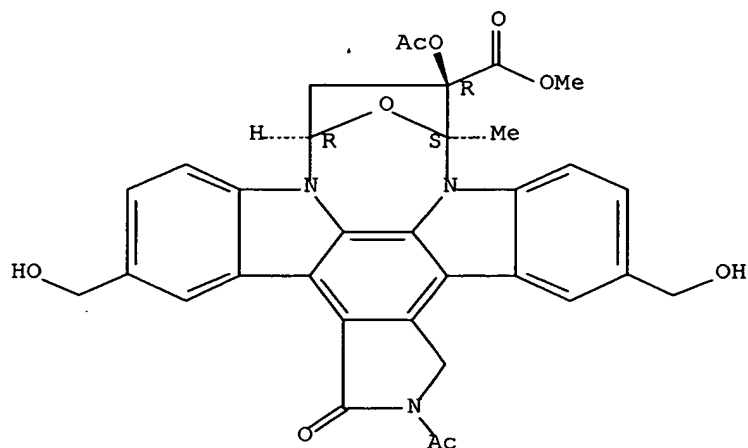
(Reactant or reagent)

(prepn. of K-252a derivs. as protein kinase inhibitors for treatment
 of
 neurol. disorders)

RN 156177-91-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

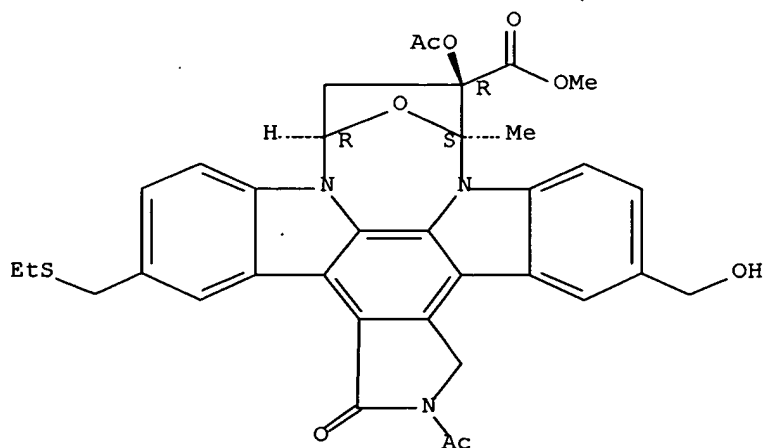
Absolute stereochemistry.



RN 156177-93-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

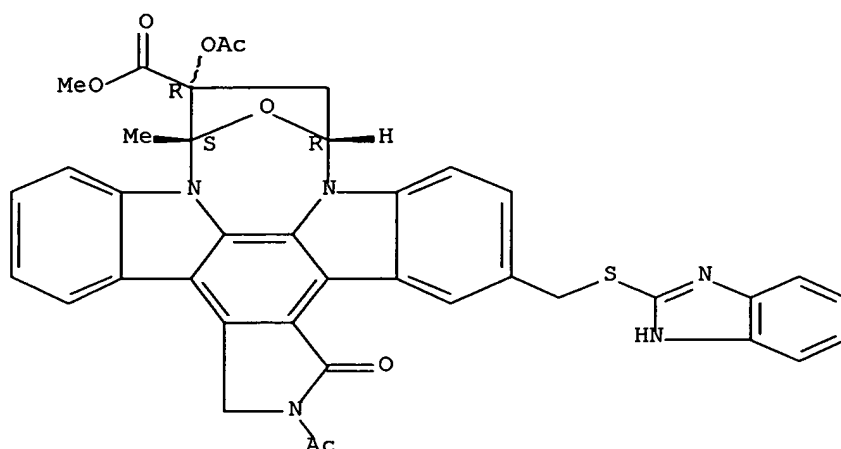


RN 167370-76-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(1H-

benzimidazol-2-ylthio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-,
methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

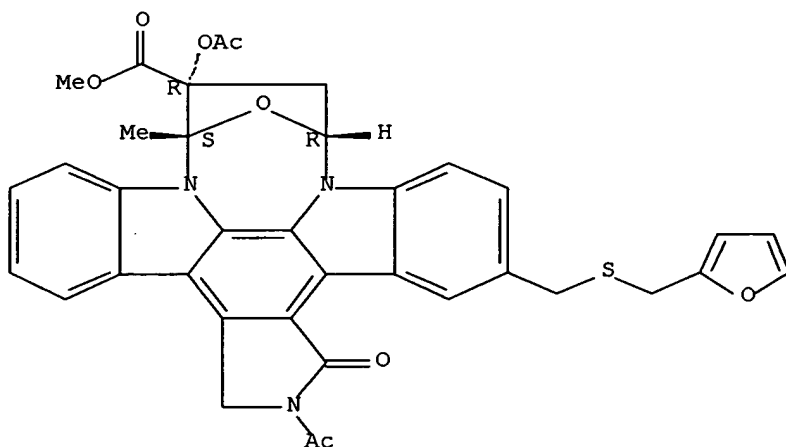
Absolute stereochemistry.



RN 167370-77-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-
[[2-furanylmethyl)thio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-,
methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

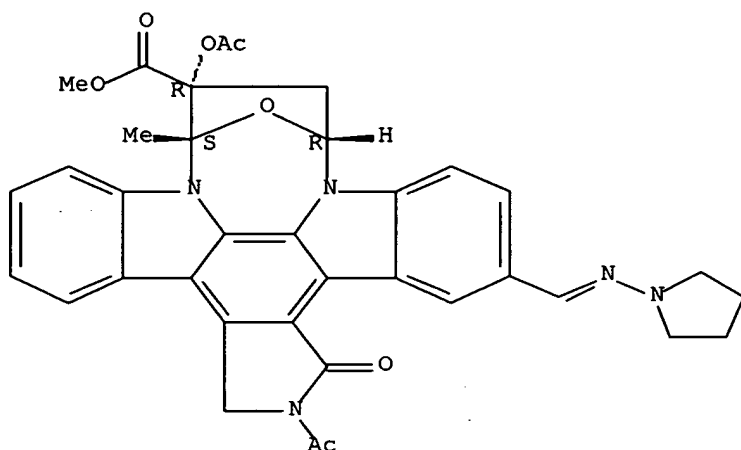
Absolute stereochemistry.



RN 167370-78-7 CAPLUS

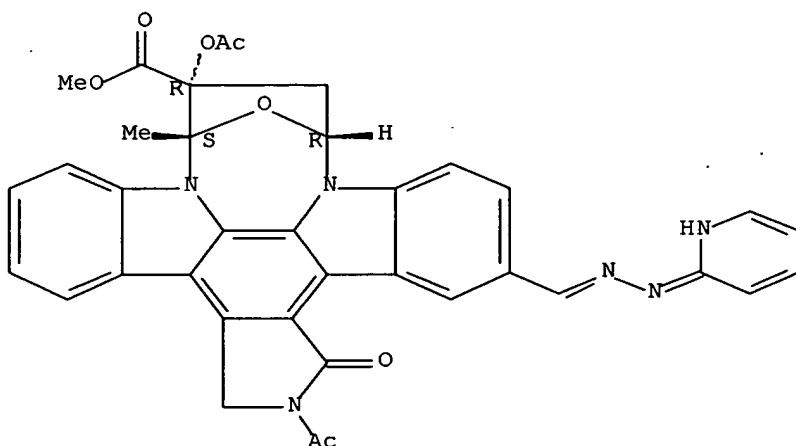
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-
2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(1-pyrrolidinylimino)methyl]-,
methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



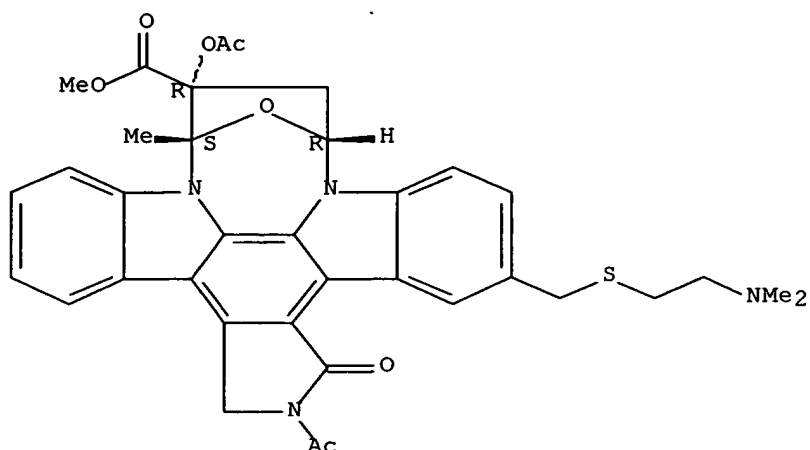
RN 167370-79-8 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(2-pyridinylhydrazono)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



RN 167370-80-1 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

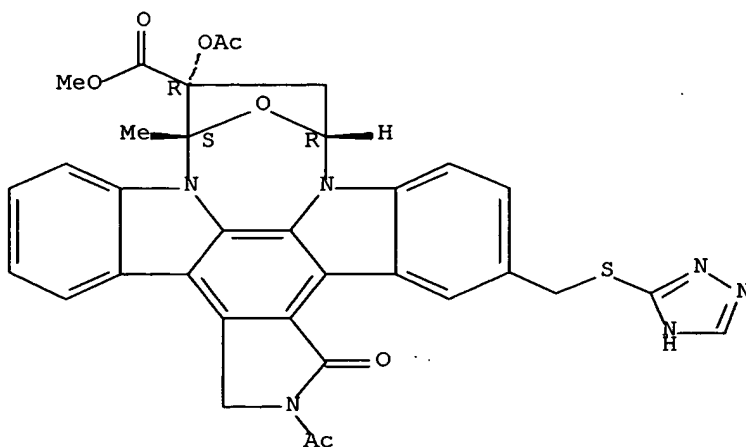
Absolute stereochemistry.



RN 167370-81-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(1H-1,2,4-triazol-3-ylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

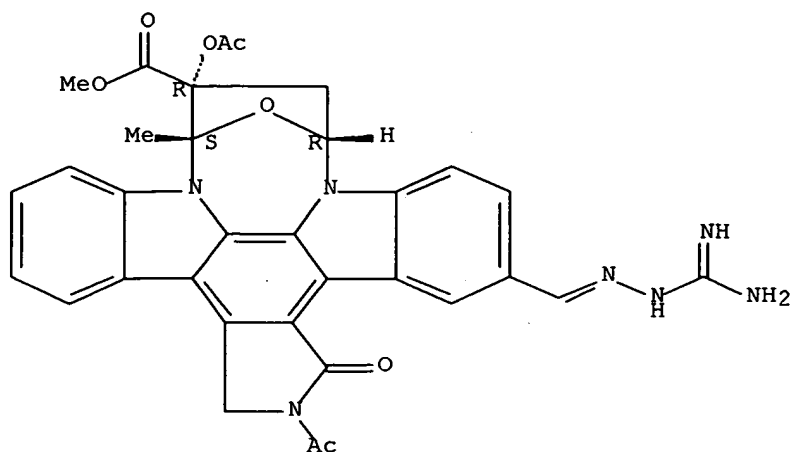


RN 167370-82-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[(aminoiminomethyl)hydrazono]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

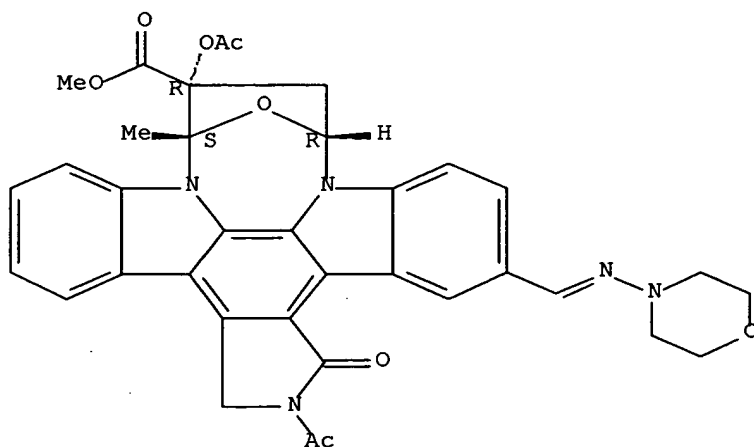


RN 167370-83-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-16-[(4-morpholinylimino)methyl]-1-oxo-methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

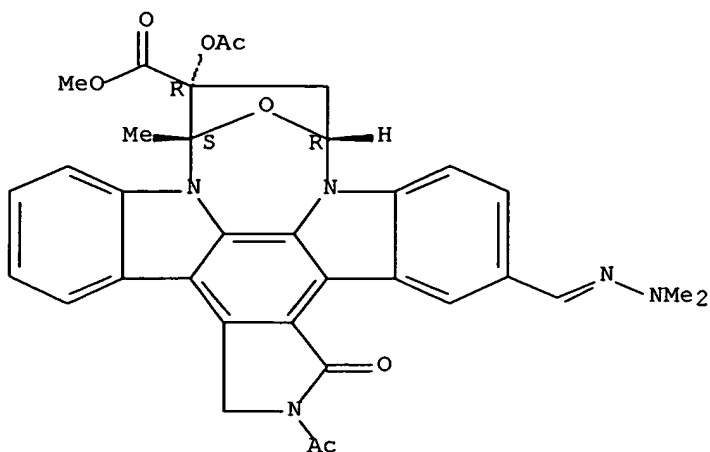


RN 167370-84-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(dimethylhydrazono)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

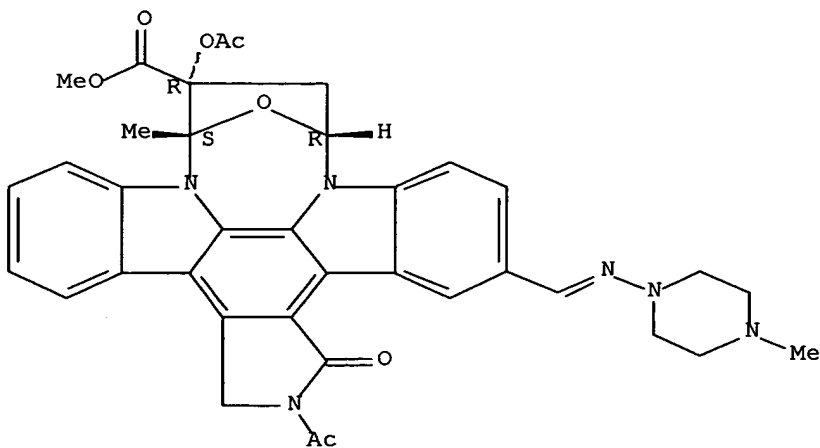
Double bond geometry unknown.



RN 167370-85-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-16-[[4-methyl-1-piperazinyl]imino]methyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

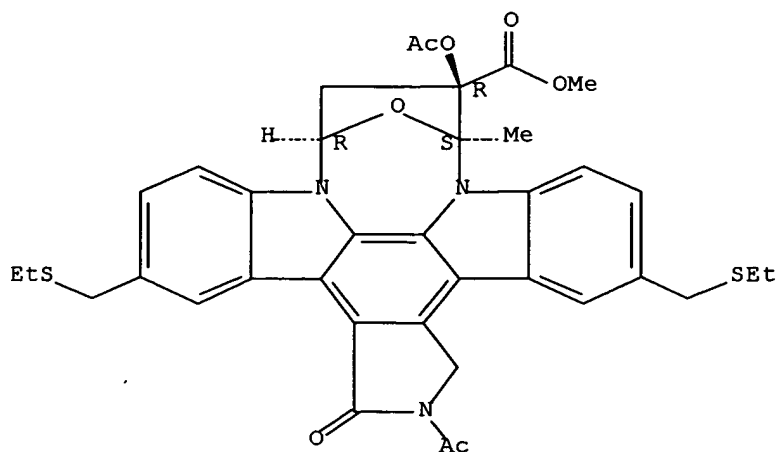
Absolute stereochemistry.
Double bond geometry unknown.



RN 173829-96-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

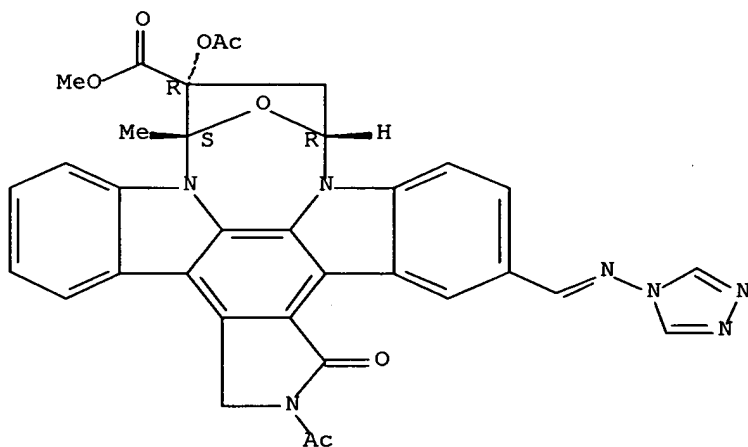


RN 178404-40-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(4H-1,2,4-triazol-4-ylimino)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

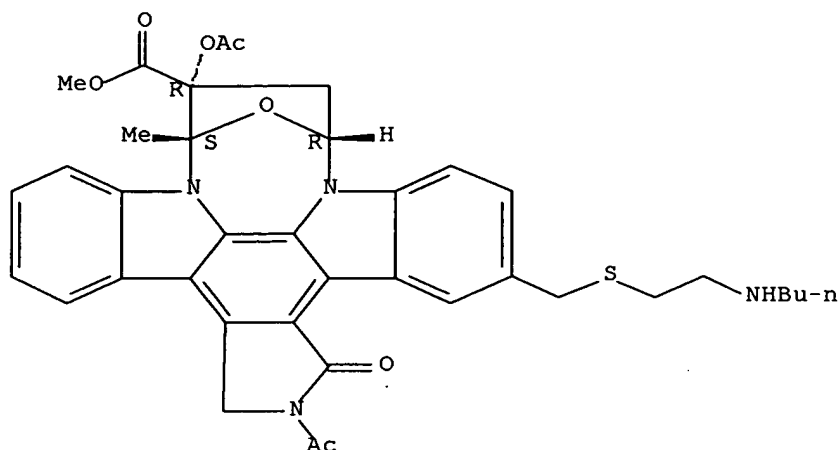
Double bond geometry unknown.



RN 178404-42-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[[2-(butylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

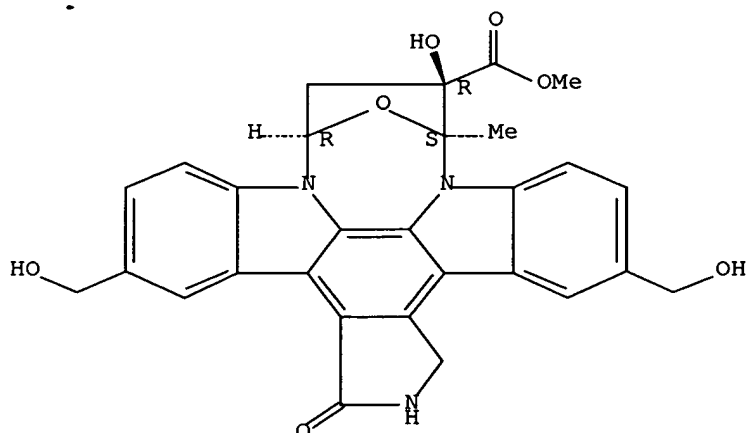
Absolute stereochemistry.



RN 178404-44-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

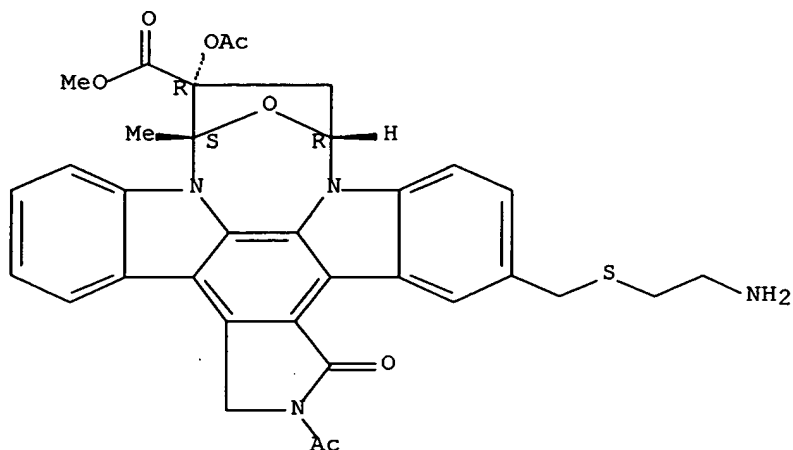
Absolute stereochemistry.



RN 178404-46-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, '2-acetyl-10-(acetyloxy)-16-[[(2-aminoethyl)thio]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

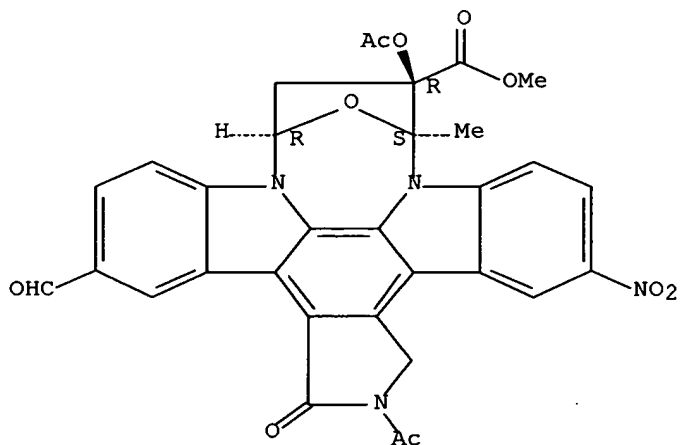
Absolute stereochemistry.



RN 178404-57-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-5-nitro-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

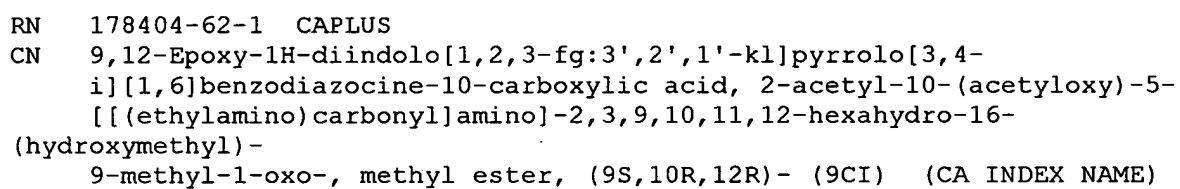
Absolute stereochemistry.



RN 178404-61-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-[[(ethylamino) carbonyl] amino]-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 41 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1997:276795 CAPLUS
 DN 126:343708
 TI K-252a derivatives for treatment of neurological disorders
 IN Saito, Hiromitsu; Matsuda, Yuzuru; Glicksman, Marcie A.; Kanai, Fumihiko;
 Kaneko, Masami; Lewis, Michael E.; Kauer, James C.; Neff, Nicola;
 Roberts-Lewis, Jill; Murakata, Chikara
 PA Cephalon, Inc., USA; Kyowa Hakko Kogyo Co., Ltd.
 SO U.S., 51 pp., Cont.-in-part of U.S. 5,461,146.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | US 5621100 | A | 19970415 | US 1994-329540 | 19941026 |
| | US 5461146 | A | 19951024 | US 1993-96561 | 19930722 |
| | EP 768312 | A2 | 19970416 | EP 1996-116661 | 19930726 |
| | EP 768312 | A3 | 19970604 | | |
| | EP 768312 | B1 | 20000906 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
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| | JP 2003113184 | A2 | 20030418 | JP 2002-244111 | 19930726 |
| | US 5756494 | A | 19980526 | US 1995-456642 | 19950602 |
| | US 5621101 | A | 19970415 | US 1995-486739 | 19950607 |
| | CA 2203767 | AA | 19960509 | CA 1995-2203767 | 19951004 |
| | WO 9613506 | A1 | 19960509 | WO 1995-US12965 | 19951004 |
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| | AU 9539516 | A1 | 19960523 | AU 1995-39516 | 19951004 |
| | AU 704314 | B2 | 19990422 | | |
| | EP 788501 | A1 | 19970813 | EP 1995-937391 | 19951004 |
| | EP 788501 | B1 | 20020605 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, | | | | |
| SE | BR 9509480 | A | 19970930 | BR 1995-9480 | 19951004 |
| | JP 10510514 | T2 | 19981013 | JP 1995-514605 | 19951004 |
| | EP 1125938 | A1 | 20010822 | EP 2001-110483 | 19951004 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV | | | | |
| | NZ 295871 | A | 20010928 | NZ 1995-295871 | 19951004 |
| | AT 218571 | E | 20020615 | AT 1995-937391 | 19951004 |
| | ES 2177665 | T3 | 20021216 | ES 1995-937391 | 19951004 |
| | US 5741808 | A | 19980421 | US 1997-800383 | 19970214 |
| PRAI | US 1992-920102 | B2 | 19920724 | | |
| | US 1993-96561 | A2 | 19930722 | | |
| | EP 1993-917337 | A3 | 19930726 | | |
| | EP 1996-116661 | A3 | 19930726 | | |
| | JP 1994-504731 | A3 | 19930726 | | |
| | US 1994-329540 | A2 | 19941026 | | |

US 1995-456642 A 19950602
 EP 1995-937391 A3 19951004
 WO 1995-US12965 W 19951004

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB K-252a derivs. were prepd. as agents for treatment of neurol. disorders. The deriv. I is claimed. I was prepd. from from dialdehyde II via redn. with NaBH₄, thiolation with EtSH in the presence of CSA, and deacetylation

with NaOMe. I (0.03 mg/kg QOD) had an Ipsi/Contra ratio of 93.8 for cortical ChAT activity in NBM rats with lesions.

IT 121664-89-9P

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological

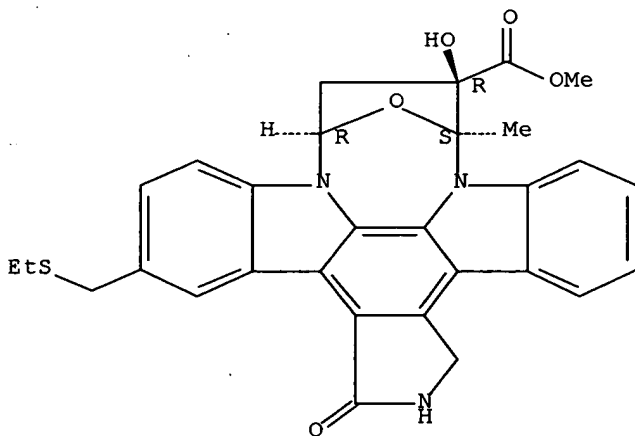
study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of K-252a derivs. as protein kinase inhibitors for treatment of neurol. disorders)

RN 121664-89-9 CAPLUS

CN .9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

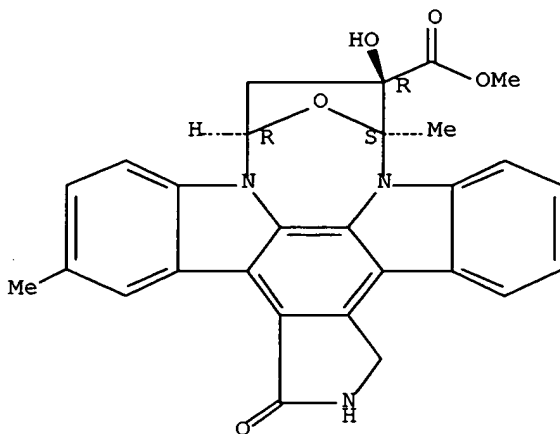


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 167371-04-2P 167371-05-3P 167371-06-4P
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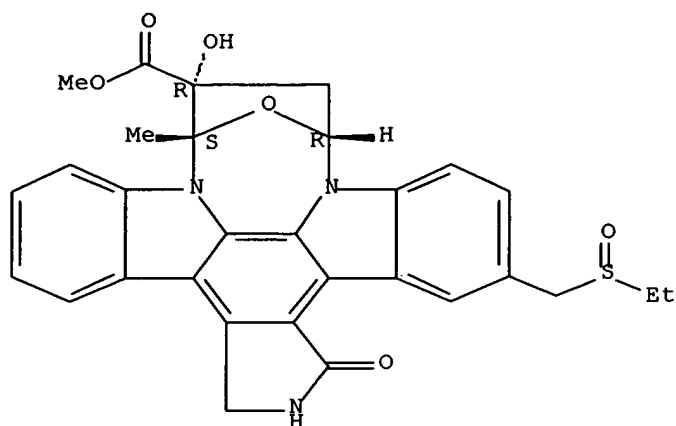
RL: BAC (Biological activity or effector, except adverse); BSU
(Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of K-252a derivs. as protein kinase inhibitors for treatment
of
neuro. disorders)
RN 118735-80-1 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-
hydroxy-9,16-dimethyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA
INDEX
NAME)

Absolute stereochemistry.



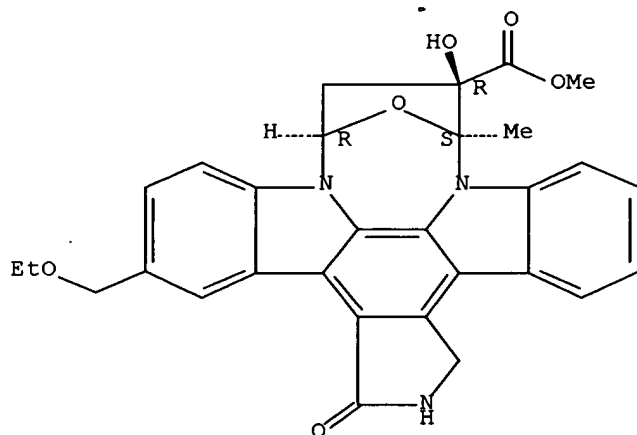
RN 121664-90-2 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfinyl)methyl]-
2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
(9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



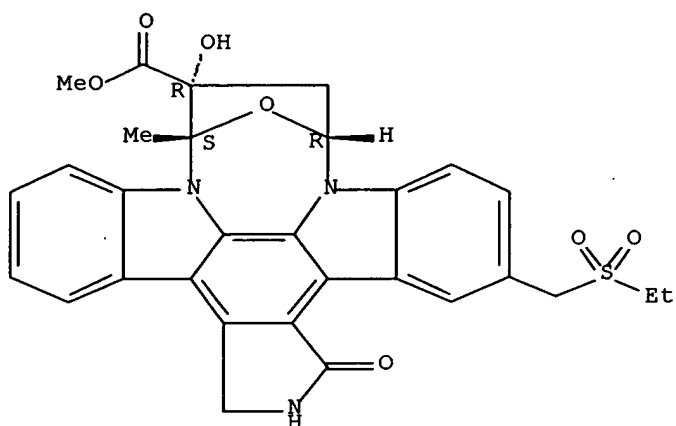
RN 121665-11-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.



RN 156177-61-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfonyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

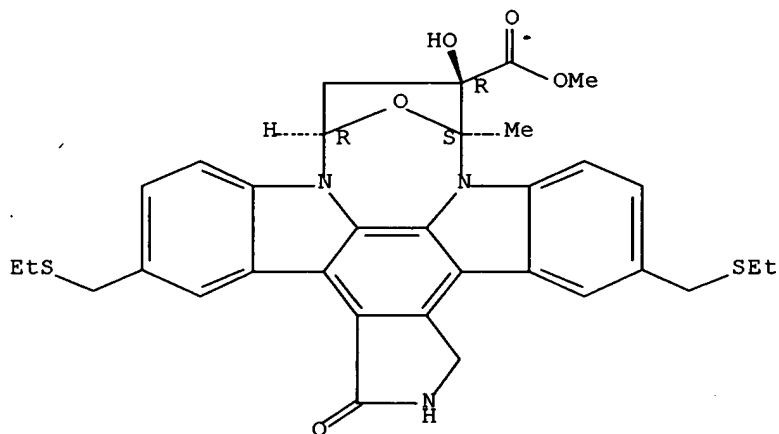
Absolute stereochemistry.



RN 156177-65-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

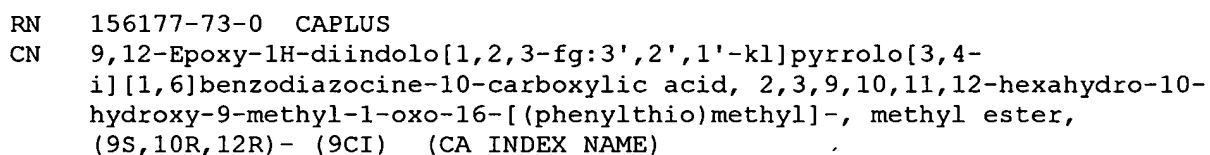
Absolute stereochemistry.



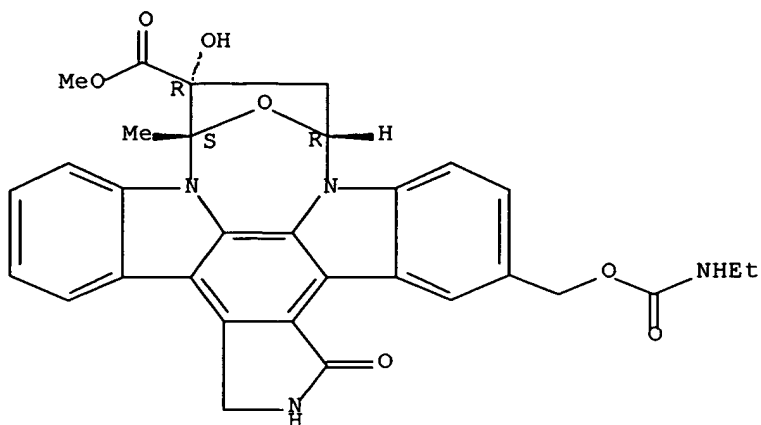
RN 156177-66-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



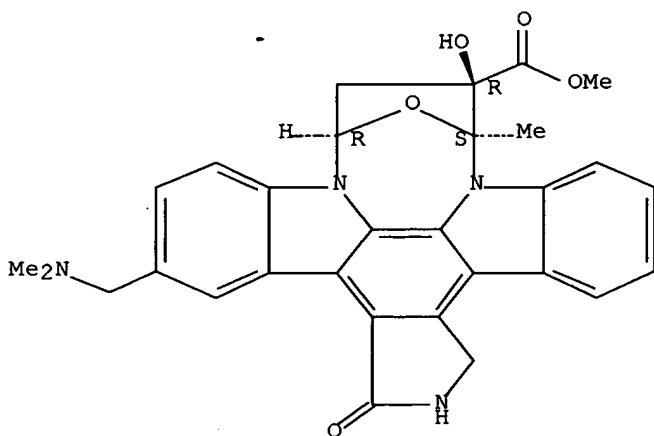
Absolute stereochemistry.



RN 156177-79-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(dimethylamino)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

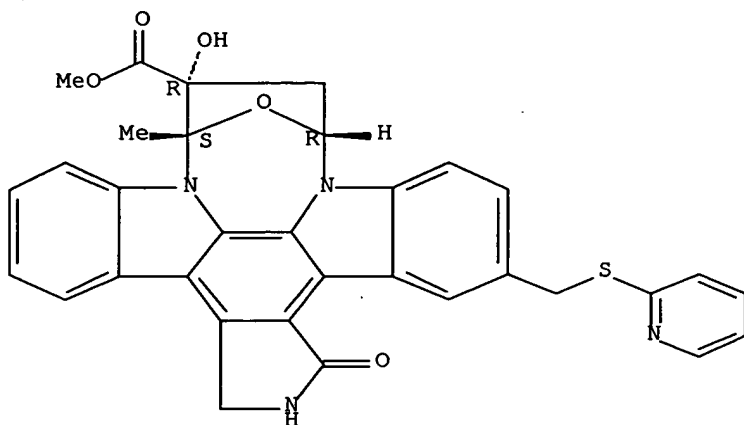
Absolute stereochemistry.



RN 167371-04-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyridinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

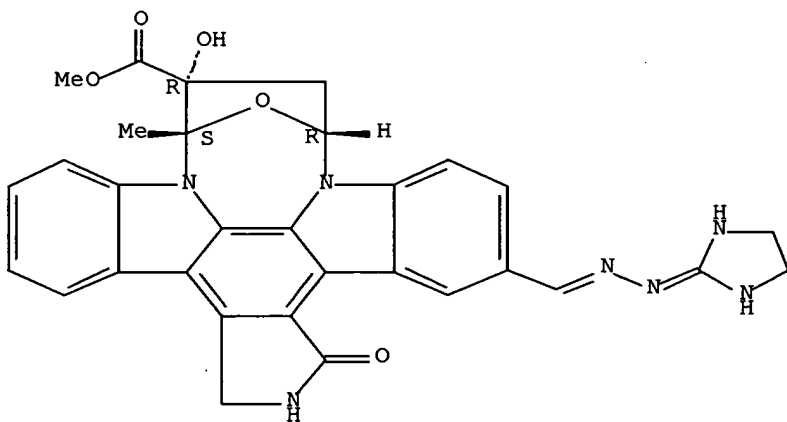


RN 167371-05-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(4,5-dihydro-1H-imidazol-2-yl)hydrazono]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

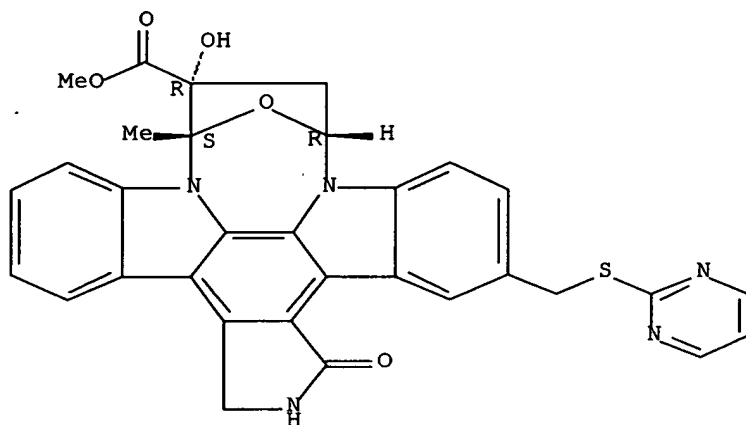
Double bond geometry unknown.



RN 167371-06-4 CAPLUS

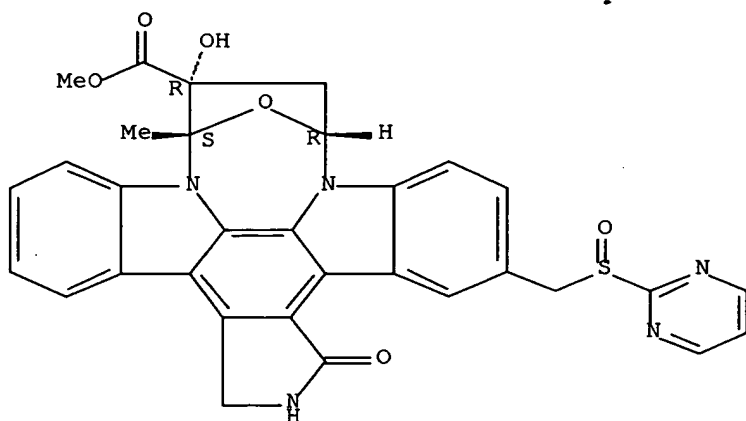
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyrimidinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



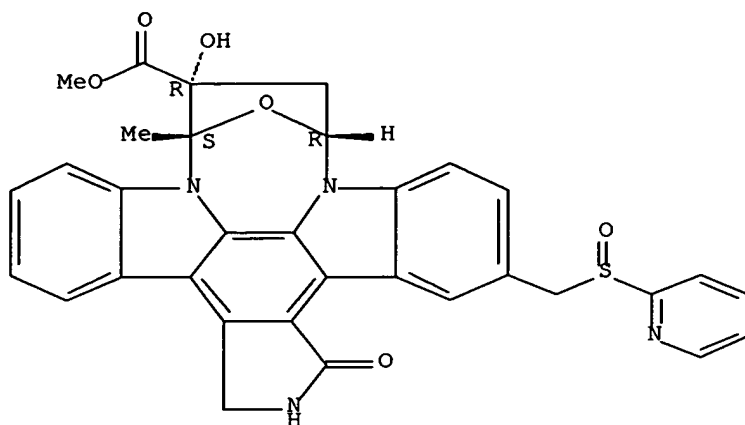
RN 167371-07-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyrimidinylsulfinyl)methyl]-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



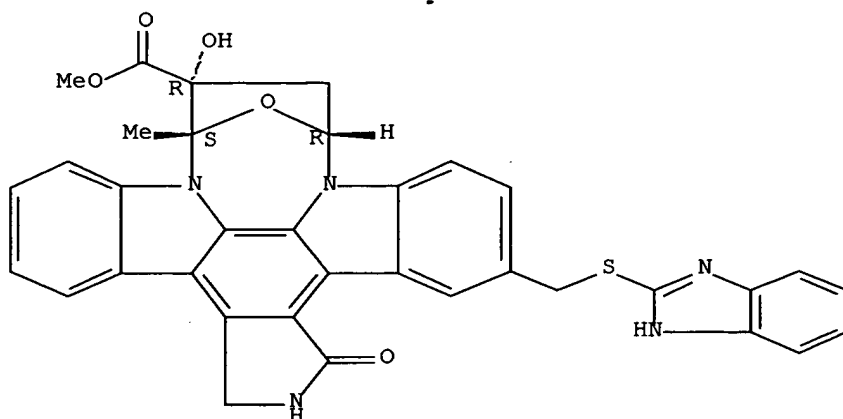
RN 167371-08-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyridinylsulfinyl)methyl]-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



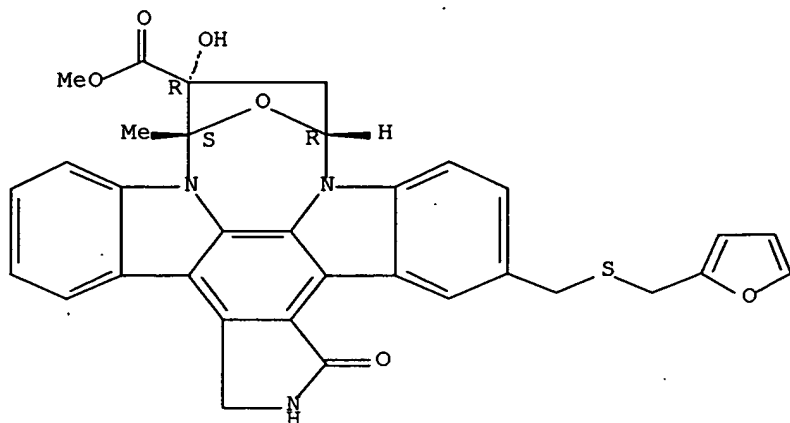
RN 167371-09-7 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(1H-benzimidazol-2-ylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 167371-10-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[2-furanylmethyl)thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

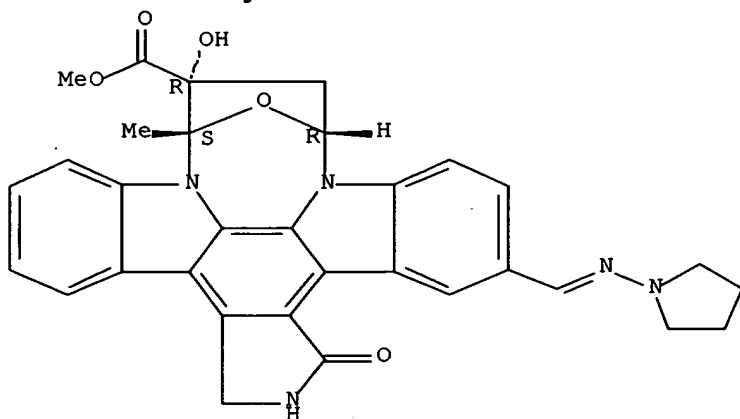


RN 167371-11-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1-pyrrolidinylimino)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

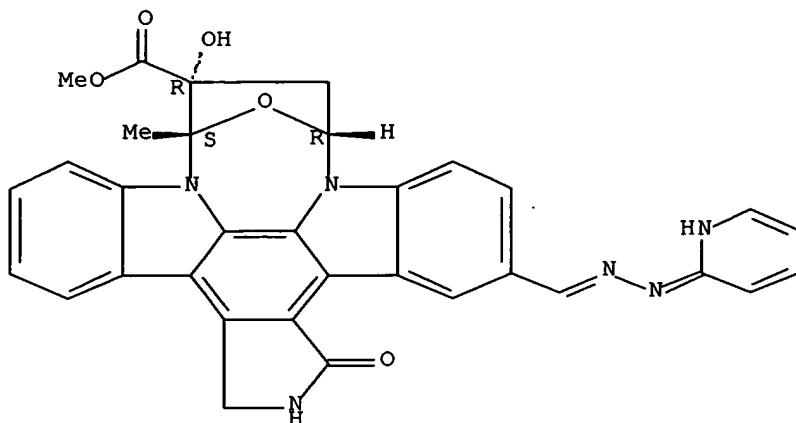


RN 167371-12-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyridinylhydrazono)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

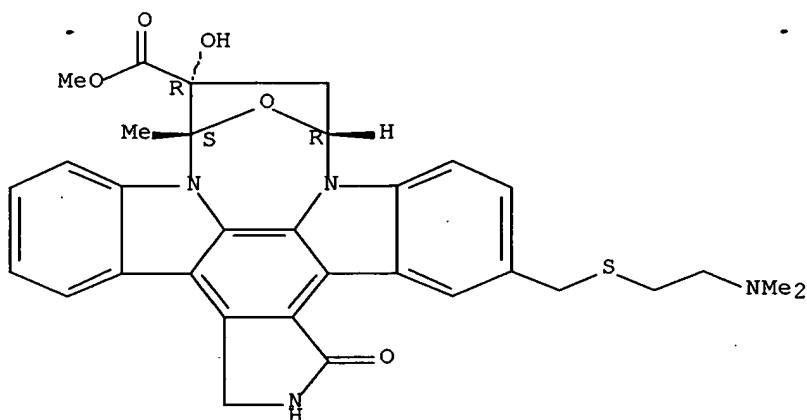
Double bond geometry unknown.



RN 167371-13-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

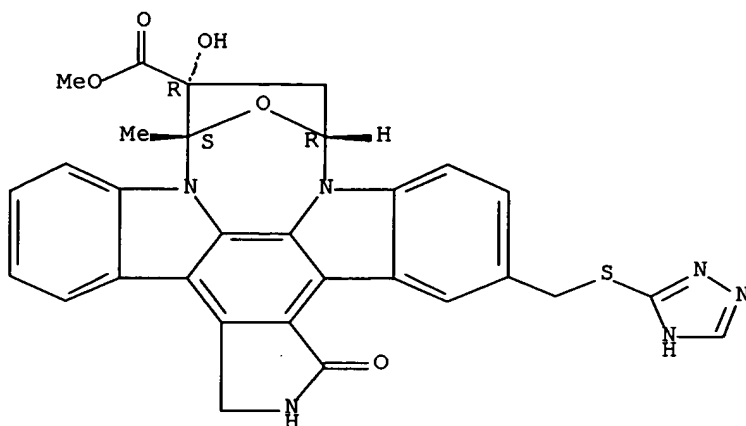
Absolute stereochemistry.



RN 167371-14-4 CAPLUS

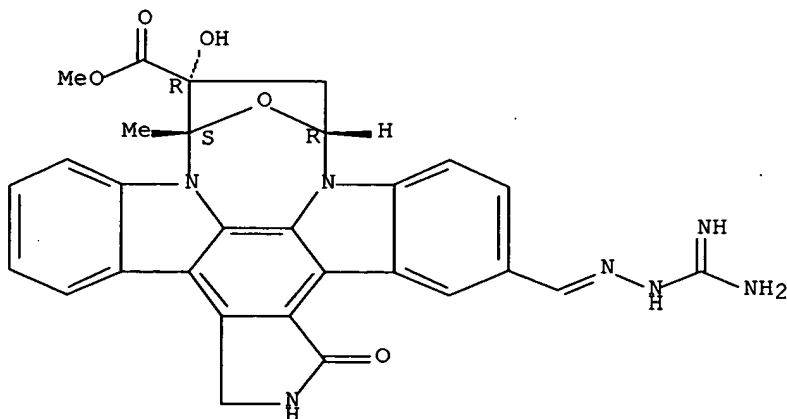
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1H-1,2,4-triazol-3-ylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



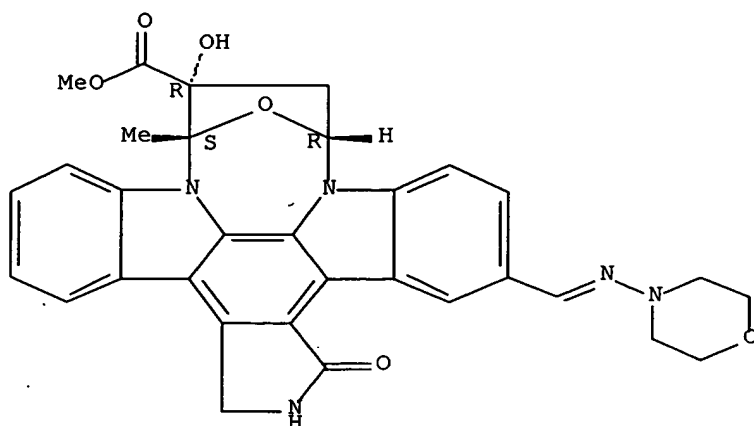
RN 167371-15-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-
 [(aminoiminomethyl)hydrazono
]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl
 ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.



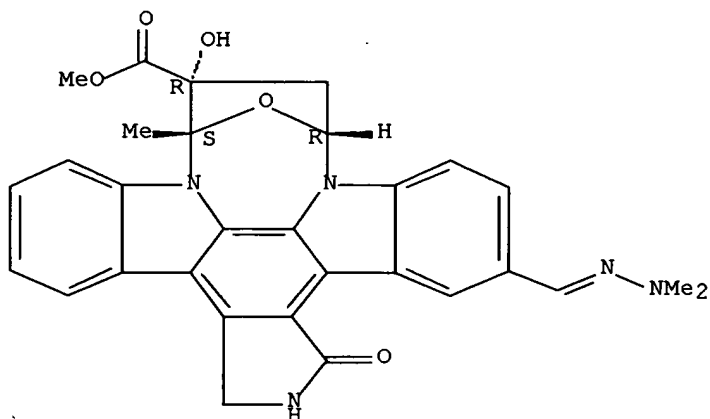
RN 167371-16-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-
 hydroxy-9-methyl-16-[(4-morpholinylimino)methyl]-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.



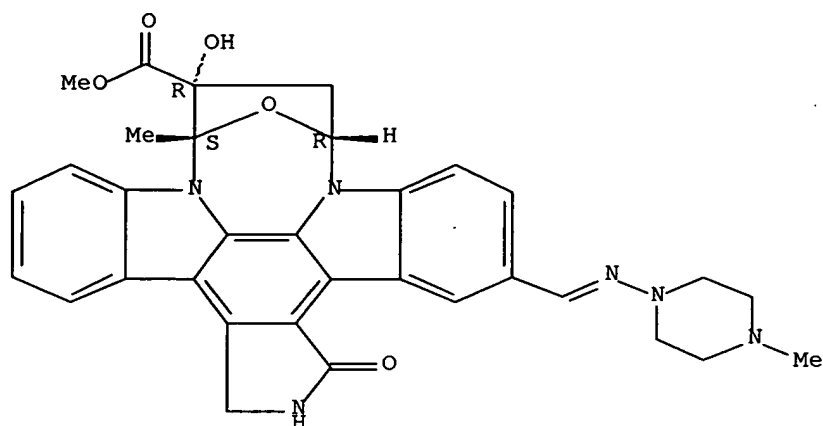
RN 167371-17-7 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-
 [(dimethylhydrazono)methyl]-
 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.



RN 167371-18-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-16-[[(4-methyl-1-piperazinyl) imino]methyl]-1-oxo-, methyl
 ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.

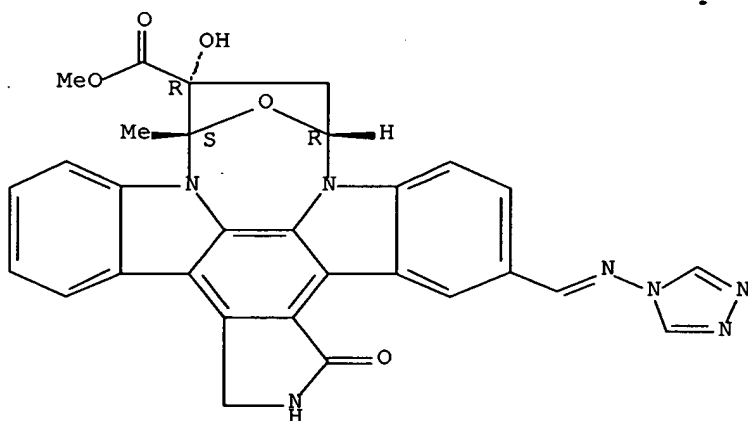


RN 178404-41-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(4H-1,2,4-triazol-4-ylimino)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

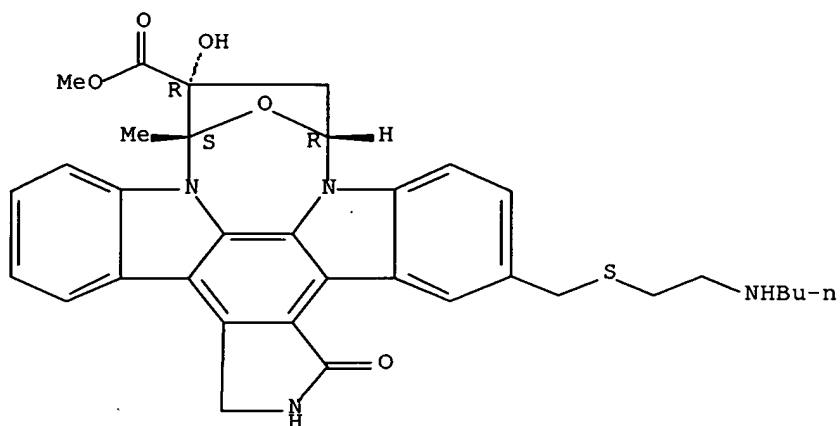
Double bond geometry unknown.



RN 178404-43-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[2-(butylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

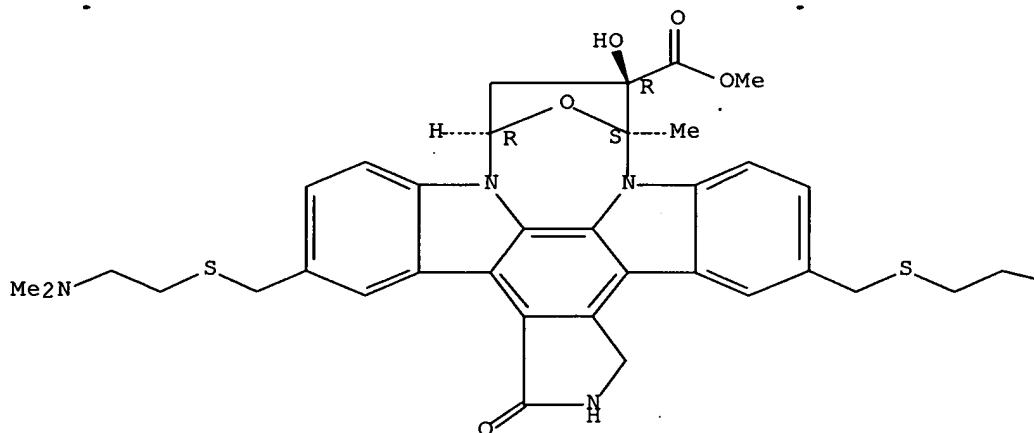


RN 178404-45-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

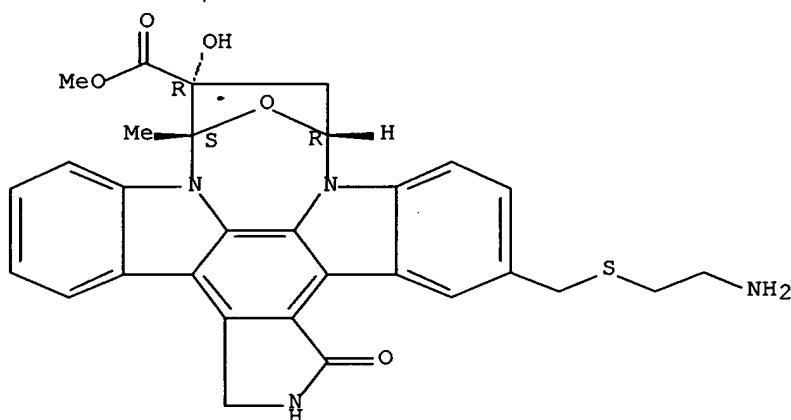
PAGE 1-A



—NMe₂

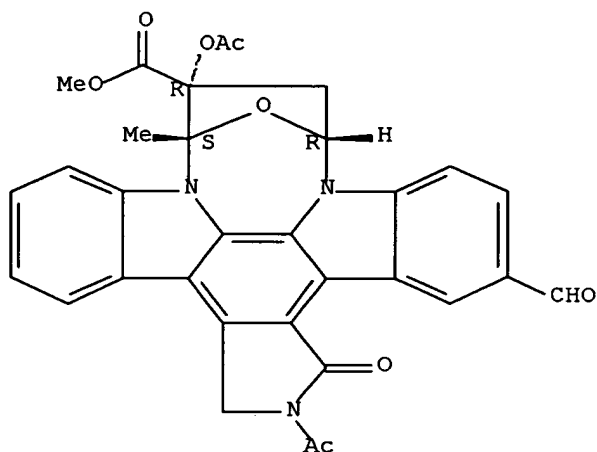
RN 178404-47-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(2-aminoethyl)thio]methyl]-
 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



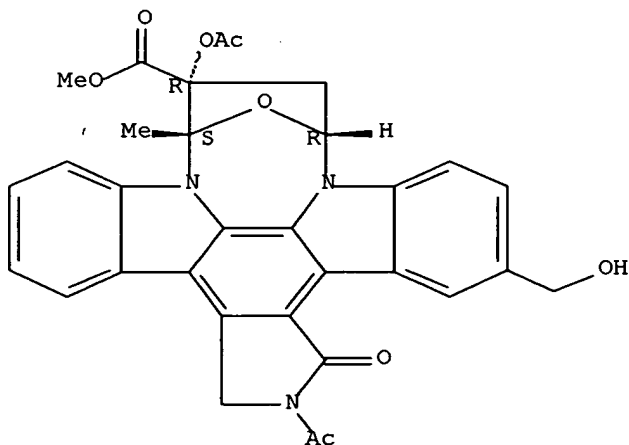
IT 118777-59-6 118777-60-9 121664-78-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. of K-252a derivs. as protein kinase inhibitors for treatment
 of
 neurol. disorders)
 RN 118777-59-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



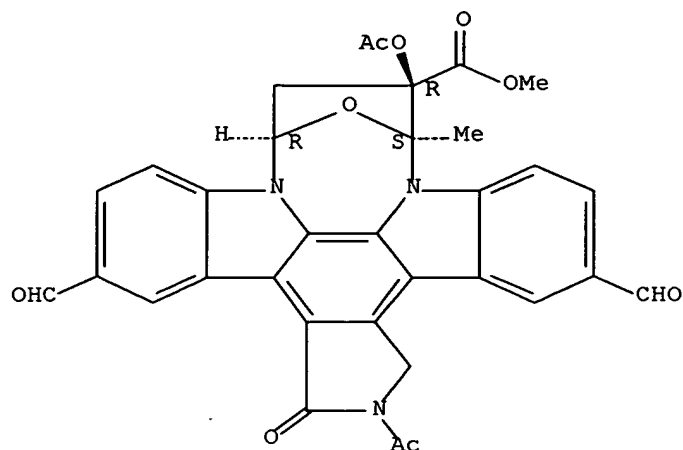
RN 118777-60-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 121664-78-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-diformyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 156177-91-2P 156177-93-4P 167370-76-5P
 167370-77-6P 167370-78-7P 167370-79-8P
 167370-80-1P 167370-81-2P 167370-82-3P
 167370-83-4P 167370-84-5P 167370-85-6P
 173829-96-4P 178404-40-5P 178404-42-7P
 178404-44-9P 178404-46-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

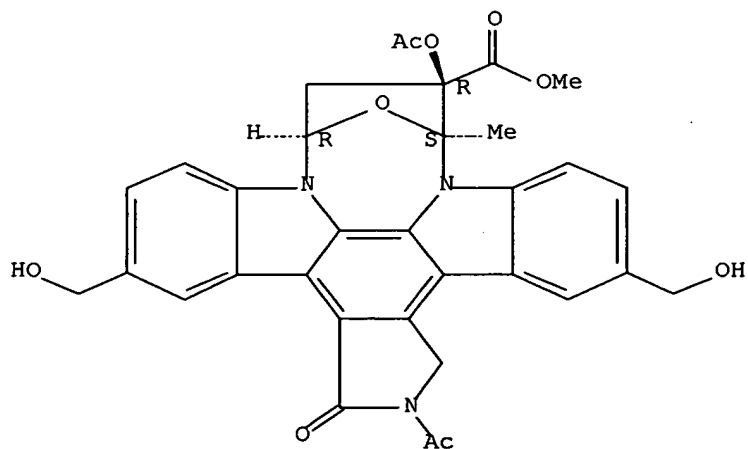
(Reactant or reagent)

(prepn. of K-252a derivs. as protein kinase inhibitors for treatment
 of
 neurol. disorders)

RN 156177-91-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
 i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-
 2,3,9,10,11,12-hexahydro-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl
 ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

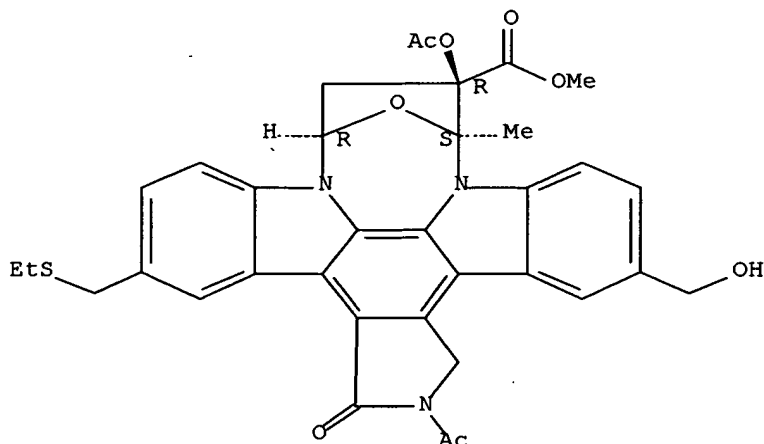
Absolute stereochemistry.



RN 156177-93-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

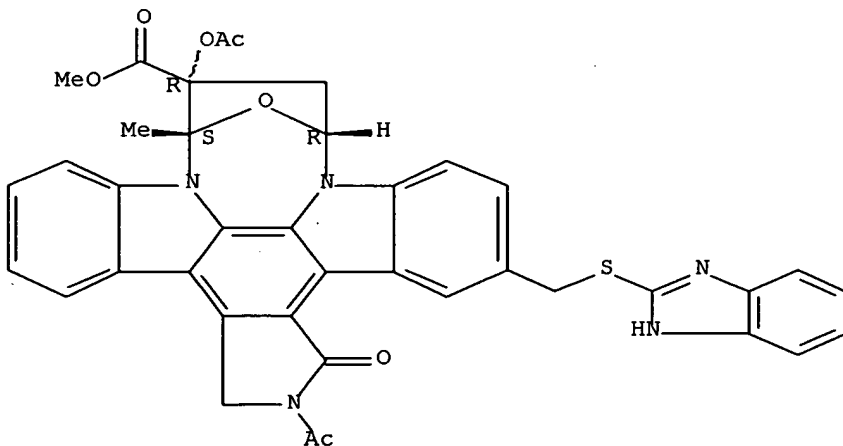
Absolute stereochemistry.



RN 167370-76-5 CAPLUS .

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(1H-benzimidazol-2-ylthio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

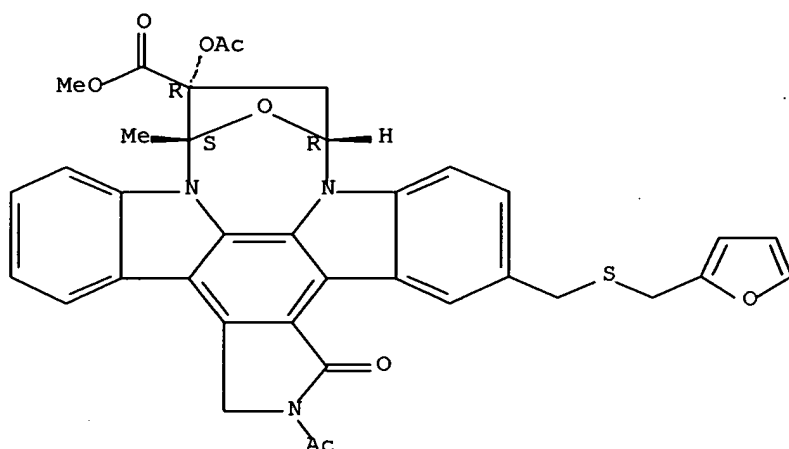


RN 167370-77-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[2-

furanylmethyl)thio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-,
methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

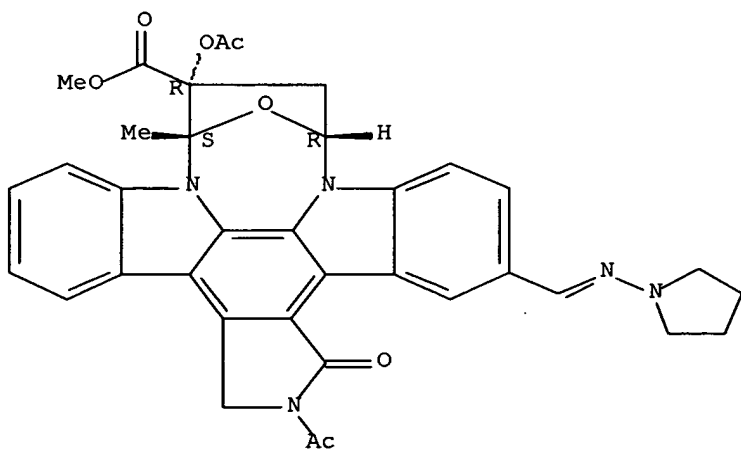


RN 167370-78-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(1-pyrrolidinylimino)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

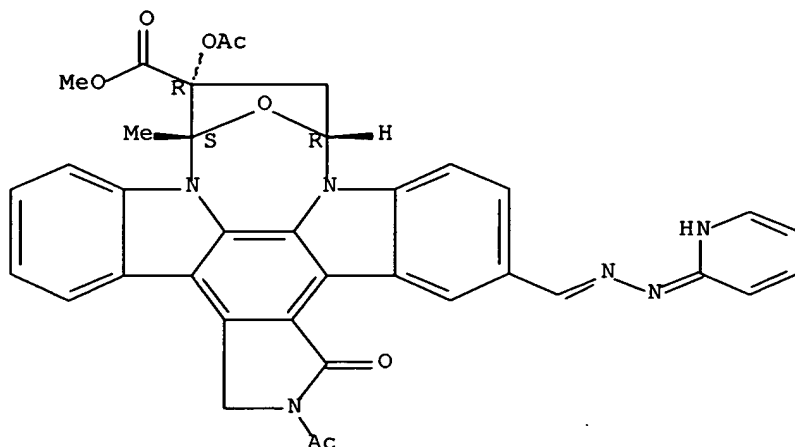
Double bond geometry unknown.



RN 167370-79-8 CAPLUS

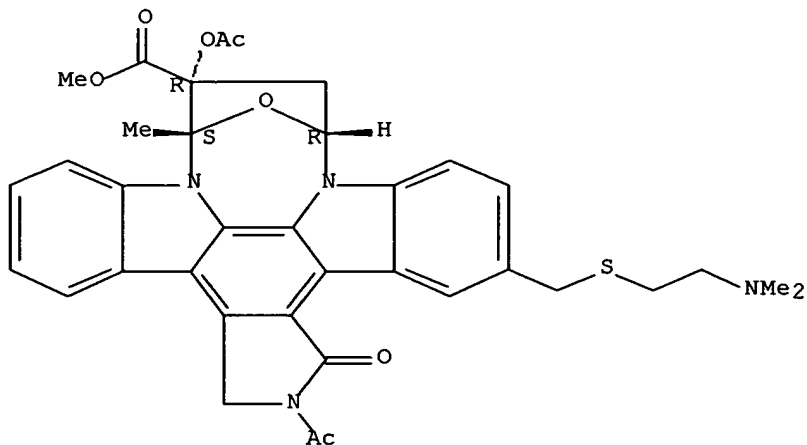
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(2-pyridinylhydrazono)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



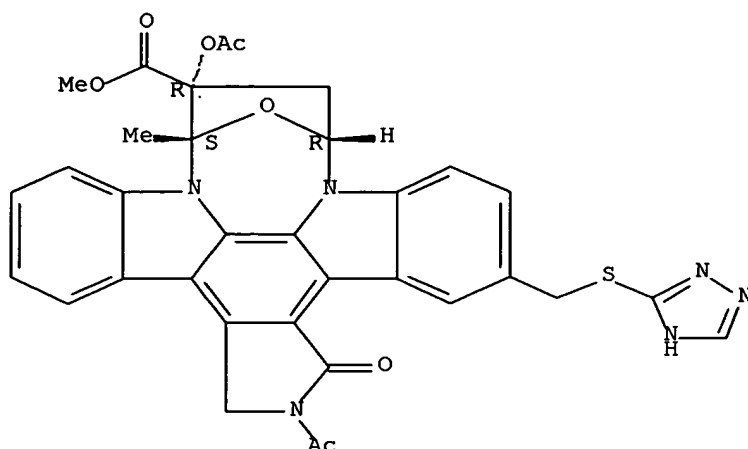
RN 167370-80-1 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



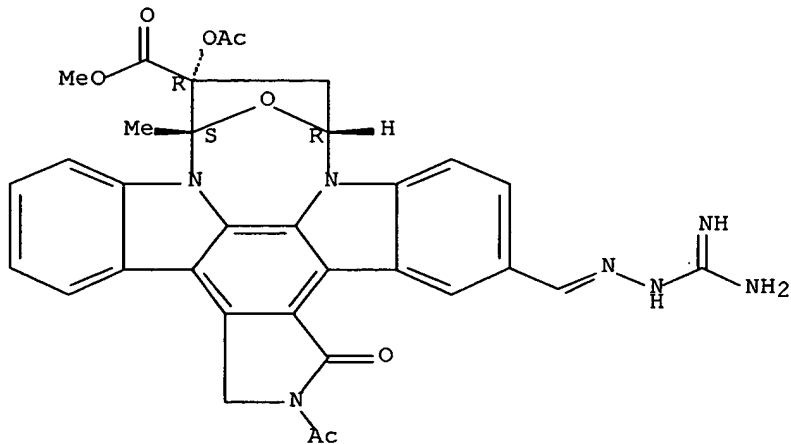
RN 167370-81-2 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(1H-1,2,4-triazol-3-ylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



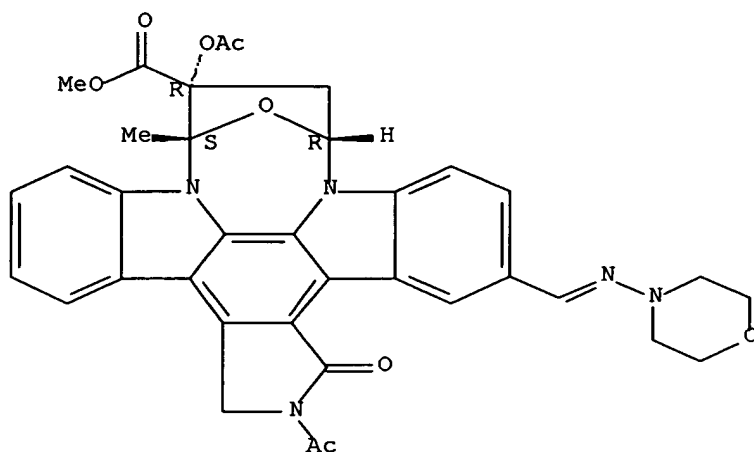
RN 167370-82-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[(aminoiminomethyl)hydrazono]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. .
 Double bond geometry unknown.



RN 167370-83-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-16-[(4-morpholinylimino)methyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.

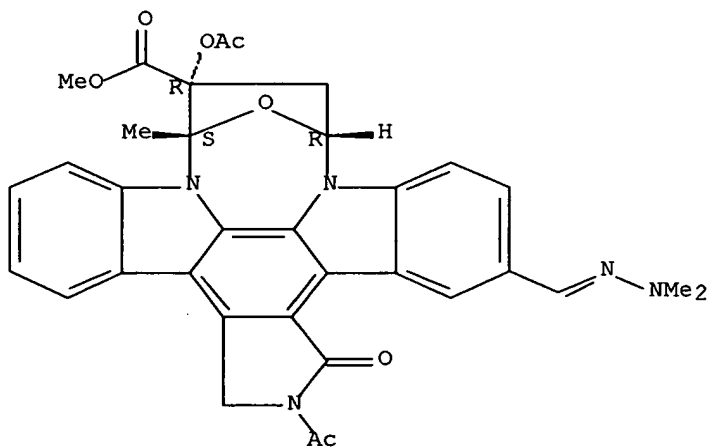


RN 167370-84-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(dimethylhydrazono)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

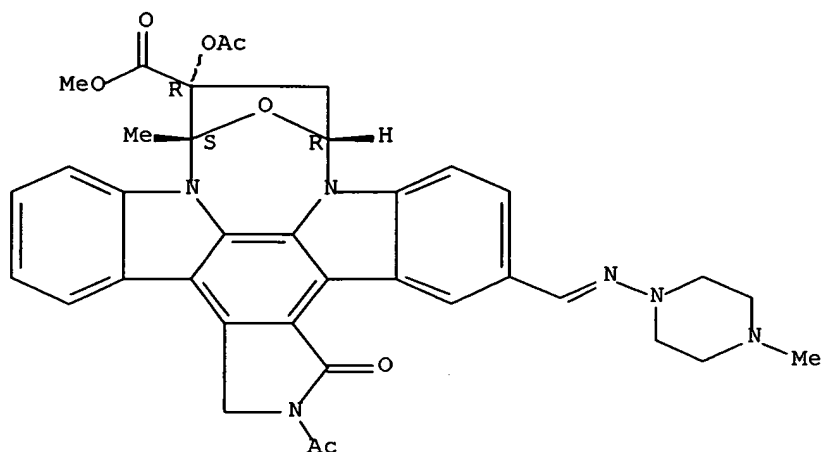


RN 167370-85-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-16-[[4-methyl-1-piperazinyl]imino]methyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

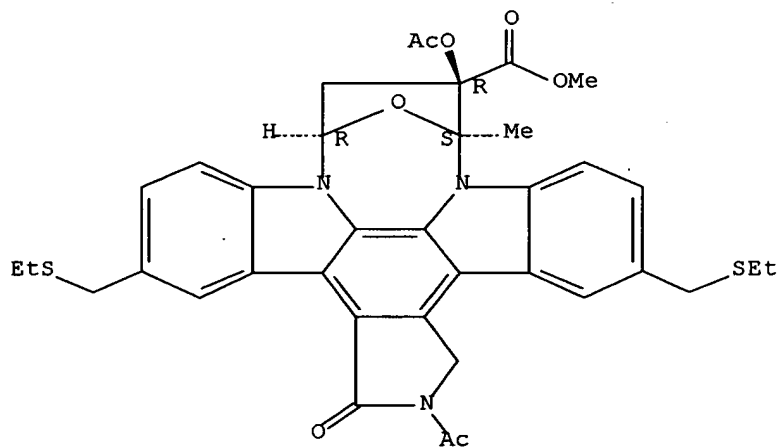
Double bond geometry unknown.



RN 173829-96-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

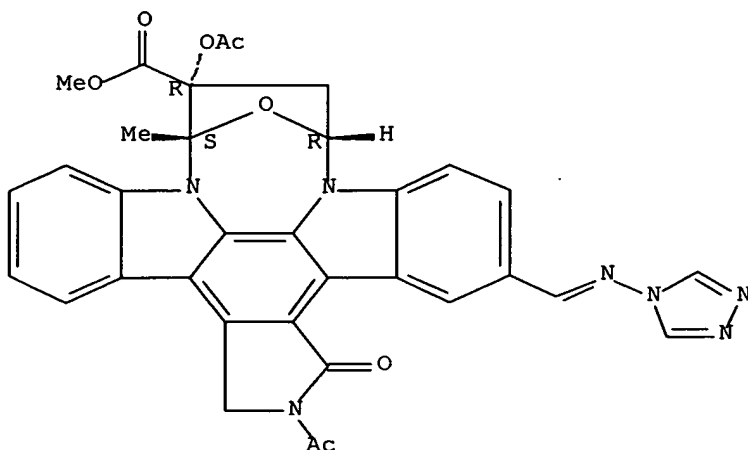


RN 178404-40-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(4H-1,2,4-triazol-4-ylimino)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

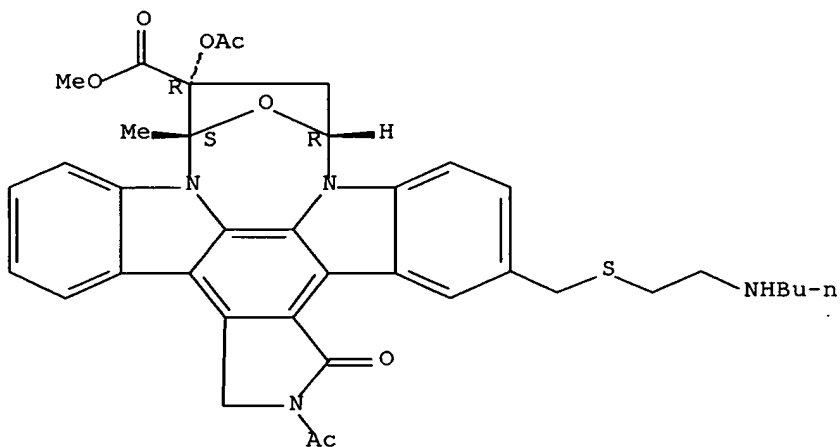
Double bond geometry unknown.



RN 178404-42-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[2-(butylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

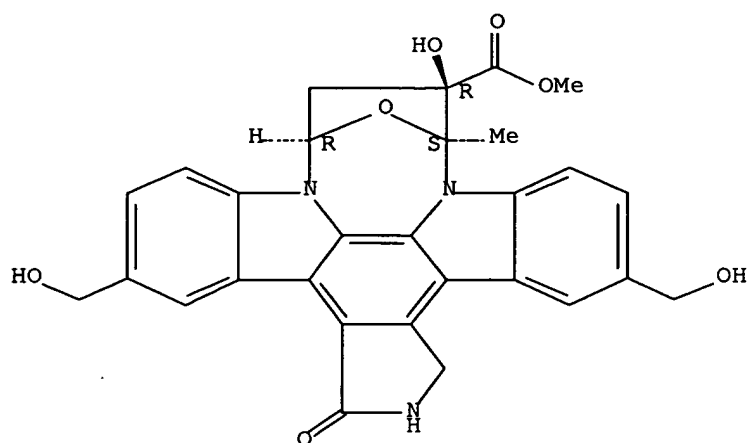
Absolute stereochemistry.



RN 178404-44-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

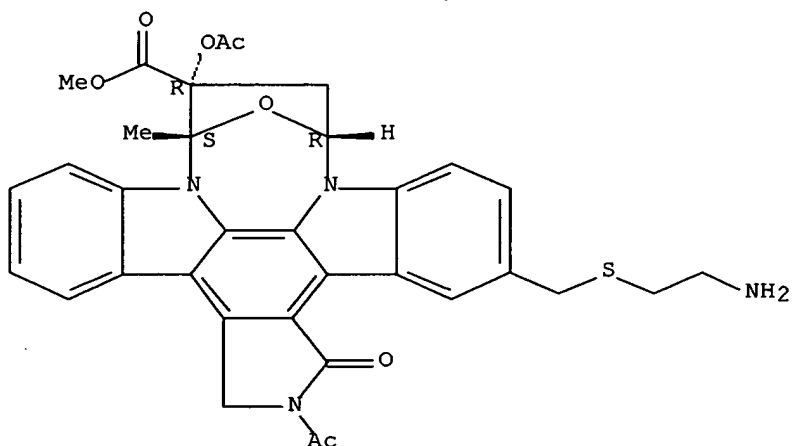
Absolute stereochemistry.



RN 178404-46-1 CAPLUS

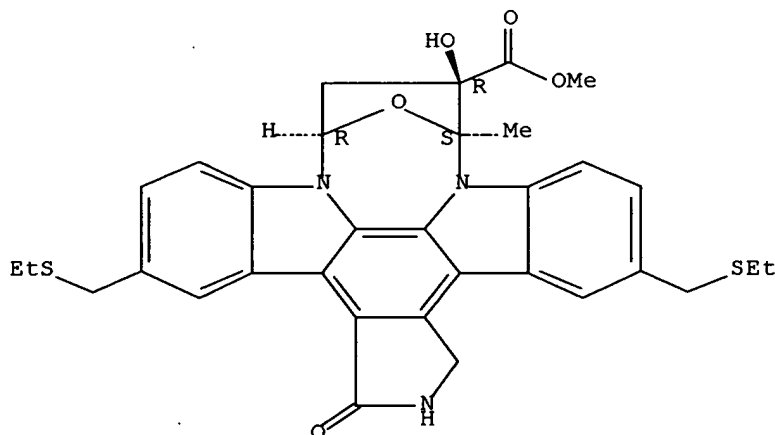
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[(2-aminoethyl)thio]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



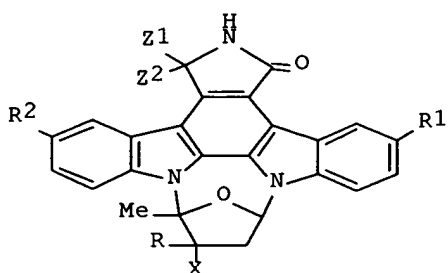
L7 ANSWER 42 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1997:132175 CAPLUS
 DN 126:207047
 TI In quest of lead compounds for novel pharmaceutical drugs
 AU Matsuda, Yuzuru
 CS Tokyo Res. Lab., Kyowa Hakko Kogyo Co., Ltd., Machida, 194, Japan
 SO Yuki Gosei Kagaku Kyokaishi (1997), 55(2), 152-158
 CODEN: YGKKAE; ISSN: 0037-9980
 PB Yuki Gosei Kagaku Kyokai
 DT Journal; General Review
 LA Japanese
 AB A review with 19 refs., on the discovery of K-252a by microorganism screening, functions and action mechanisms of K-252a and its derivs., and development of new drugs (KT7515 and KT8391) from K-252a. K-252a was found as a calmodulin inhibitor, and showed protein kinase C inhibiting activity as well. The authors found that K-252a was also an NGF inhibitor, but surprisingly it showed neurotrophic factor-like activity. KT7515 shows neurotrophic activity but does not inhibit protein kinases, and it is possibly useful for the treatment of Alzheimer's disease and amyotrophic lateral sclerosis.
 IT 156177-65-0, KT 7515
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (K-252a as a lead compd. for development of drugs for neurodegenerative diseases)
 RN 156177-65-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 43 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1997:124905 CAPLUS
 DN 126:216650
 TI Aqueous polyethylene glycol solutions containing indolocarbazoles
 IN Goldstein, Joel D.; Herman, Joseph L.
 PA Cephalon, Inc., USA
 SO U.S., 31 pp., Cont.-in-part of U.S. Ser. No. 199,390, abandoned.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | US 5599808 | A | 19970204 | US 1995-383414 | 19950203 |
| PRAI | US 1994-199390 | | 19940218 | | |
| GI | | | | | |



I

AB Solns. of indolocarbazoles, such as I [R = OH, OMe; R1 = H, Br, Cl, Me, NHCONHPh, CH2S(O)nEt, NMe2, NHCO2Me, CH2OCONHET, CH2OEt, CH2NMe2, CH2SEt,
 CH:NNH; R2 = H, Br, Cl, NHCONHET, CH2SEt, CH2OH; X = H, CH2N3, CO2Me, CH2OH, CONHET, CONH2, CONHPr, CH2S(O)Me, CH:NOH, CONHCH2CH2OH, CH:NNHCONH2,
 CH2OAc, CONHPh, CH2S(O)nPh; Z1 = Z2 = H; Z1Z2 = O; n = 0-2], contain 1-99%

org. solvent, 0.25-10% dispersant, 0-99% H2O and 0-60% polyethylene glycol. Thus, K-252a was dissolved in a solvent contg. 50% PEG-600, 2% benzyl alc., 10% Triton X-100 and 38% H2O to give a soln. contg. 10 mg/mL

K-252a. Many I were also prepd.

IT 118777-60-9 121664-78-6 187810-91-9

RL: RCT (Reactant); RACT (Reactant or reagent)

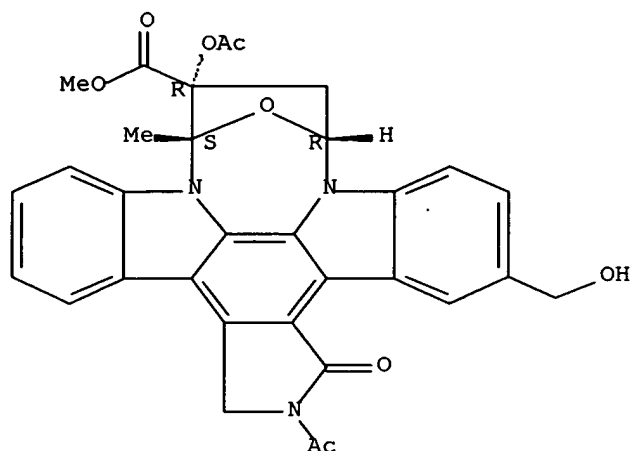
(prepn. of aq. polyethylene glycol solns. contg. indolocarbazoles)

RN 118777-60-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester,

(9S,10R,12R)- (9CI) (CA INDEX NAME)

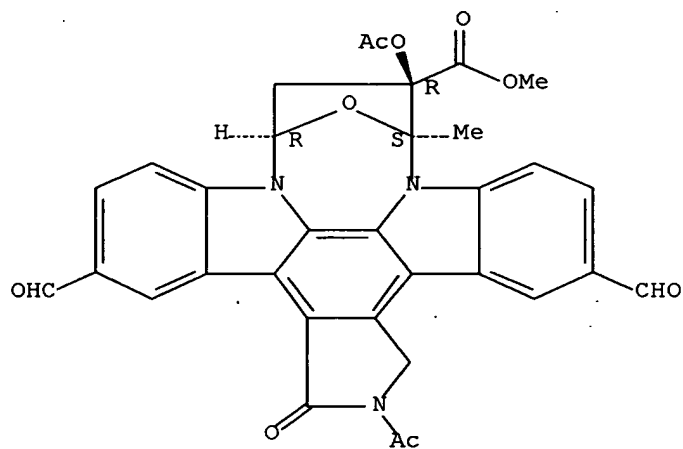
Absolute stereochemistry.



RN 121664-78-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-diformyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

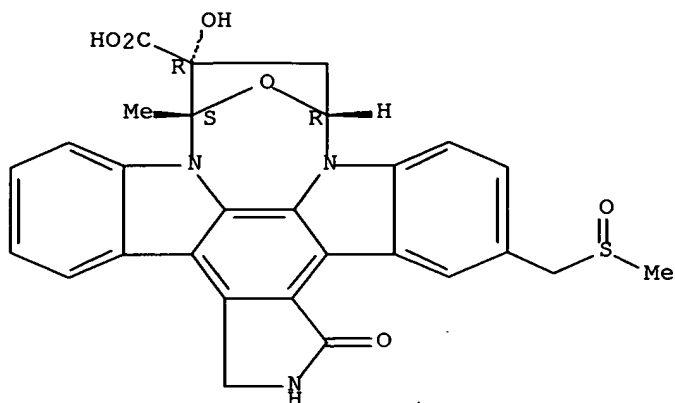
Absolute stereochemistry.



RN 187810-91-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-16-[(methylsulfinyl)methyl]-1-oxo-, [9S-(9.alpha.,10.beta.,12.alpha.)]-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 156177-91-2P 156177-93-4P 167370-72-1P
173829-96-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

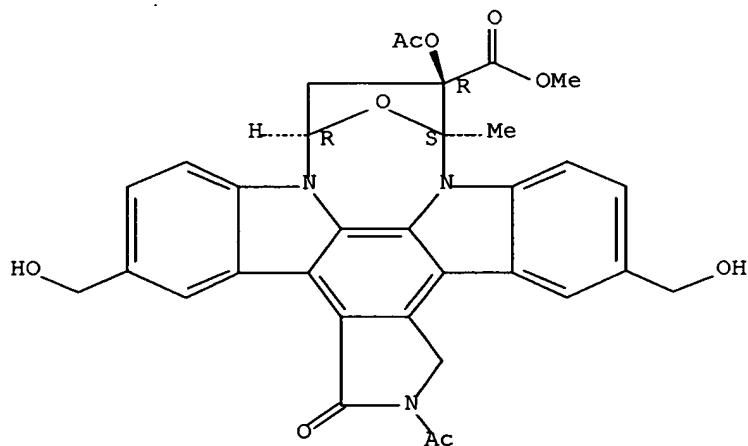
(Reactant or reagent)

(prepn. of aq. polyethylene glycol solns. contg. indolocarbazoles)

RN 156177-91-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

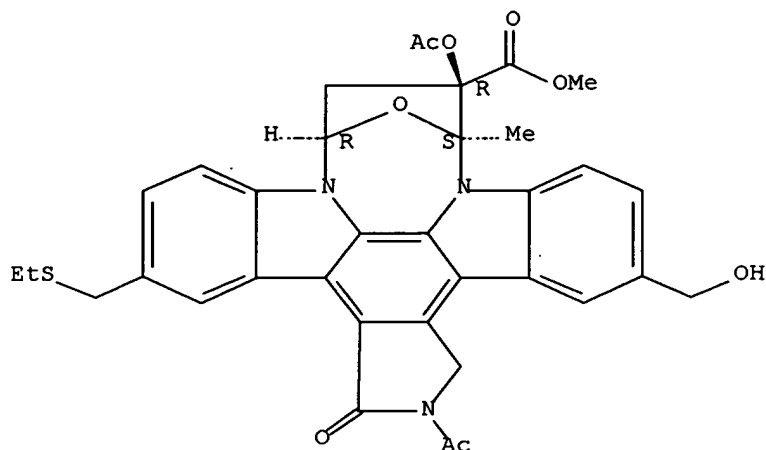
Absolute stereochemistry.



RN 156177-93-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

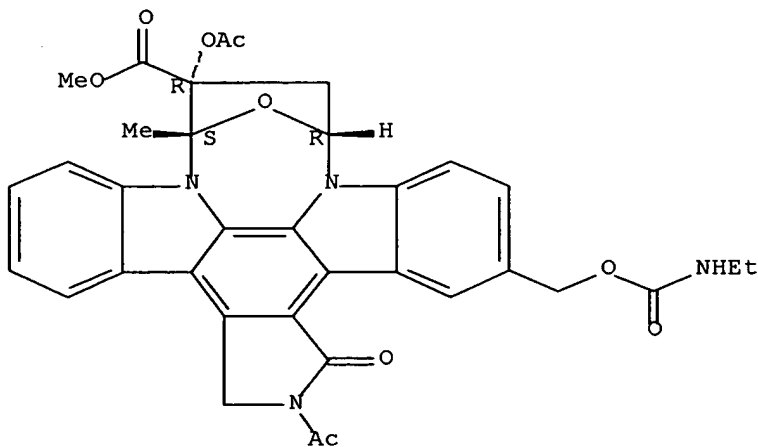
Absolute stereochemistry.



RN 167370-72-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[[(ethylamino)carbonyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

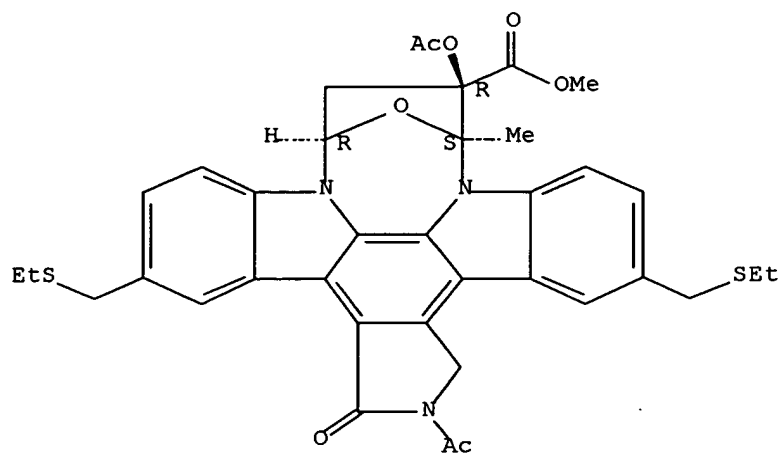
Absolute stereochemistry.



RN 173829-96-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



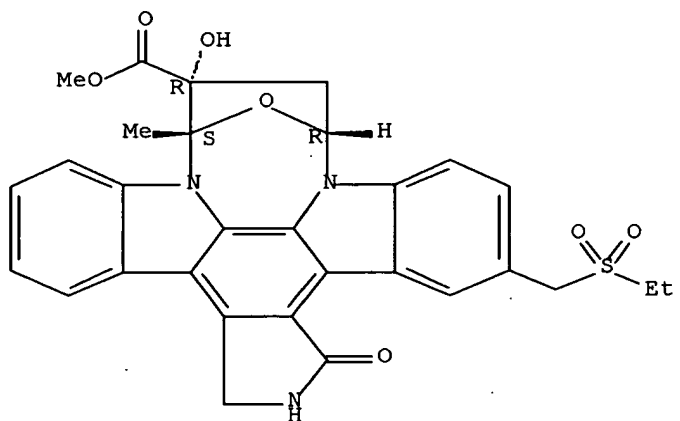
IT 156177-61-6P 156177-65-0P 156177-66-1P
156177-75-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of aq. polyethylene glycol solns. contg. indolocarbazoles)

RN 156177-61-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfonyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

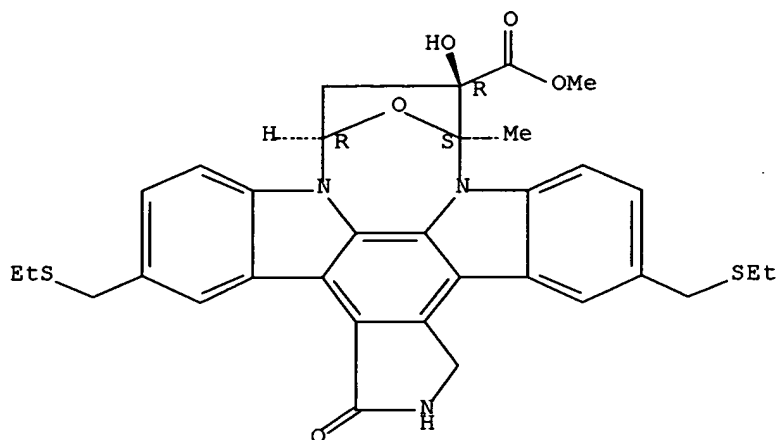
Absolute stereochemistry.



RN 156177-65-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

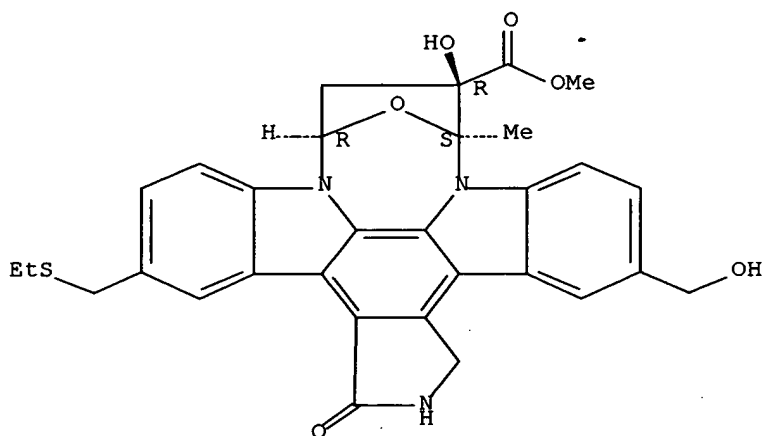
Absolute stereochemistry.



RN 156177-66-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

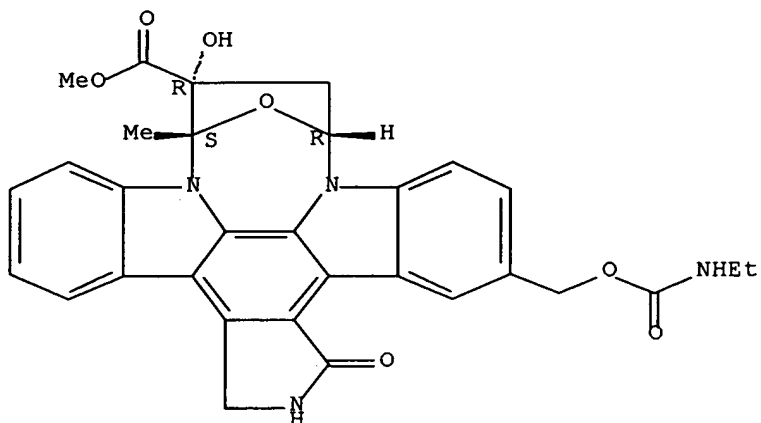
Absolute stereochemistry.



RN 156177-75-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[(ethylamino)carbonyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



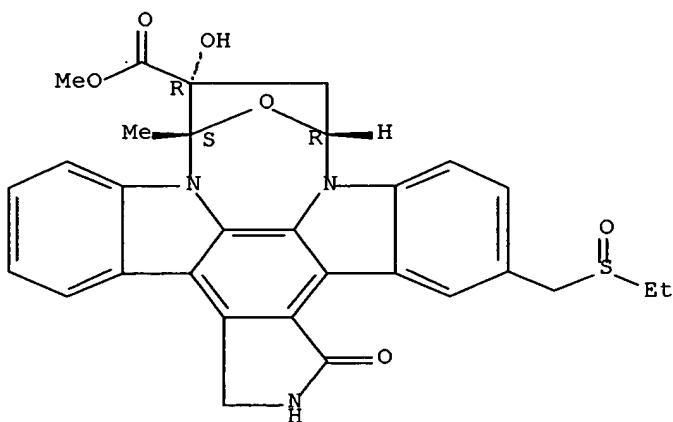
IT 121664-90-2

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of aq. polyethylene glycol solns. contg. indolocarbazoles)

RN 121664-90-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfinyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



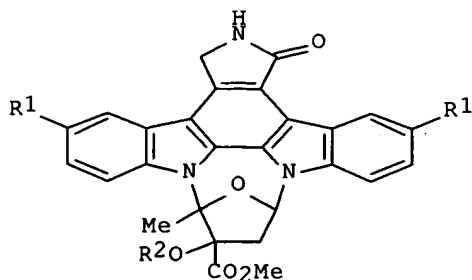
L7 ANSWER 44 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1996:404877 CAPLUS
 DN 125:86967
 TI Protein kinase inhibitors for treatment of neurological disorders
 IN Lewis, Michael E.; Kauer, James C.; Neff, Nicola; Glicksman, Marcie;
 Roberts-Lewis, Jill; Murakata, Chikara; Saito, Hiromitsu; Matsuda,
 Yuzuru;

Kanai, Fumihiko; Kaneko, Masami
 PA Cephalon, Inc., USA; Kyowa Hakko Kogyo Co., Ltd.
 SO PCT Int. Appl., 162 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 9613506 | A1 | 19960509 | WO 1995-US12965 | 19951004 |
| | W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT | | | | |
| | RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | US 5621100 | A | 19970415 | US 1994-329540 | 19941026 |
| | US 5756494 | A | 19980526 | US 1995-456642 | 19950602 |
| | AU 9539516 | A1 | 19960523 | AU 1995-39516 | 19951004 |
| | AU 704314 | B2 | 19990422 | | |
| | EP 788501 | A1 | 19970813 | EP 1995-937391 | 19951004 |
| | EP 788501 | B1 | 20020605 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, | | | | |
| SE | BR 9509480 | A | 19970930 | BR 1995-9480 | 19951004 |
| | JP 10510514 | T2 | 19981013 | JP 1995-514605 | 19951004 |
| | NZ 295871 | A | 20010928 | NZ 1995-295871 | 19951004 |
| | AT 218571 | E | 20020615 | AT 1995-937391 | 19951004 |
| PRAI | US 1994-329540 | A | 19941026 | | |
| | US 1995-456642 | A | 19950602 | | |
| | US 1992-920102 | B2 | 19920724 | | |
| | US 1993-96561 | A2 | 19930722 | | |
| | WO 1995-US12965 | W | 19951004 | | |
| OS | MARPAT 125:86967 | | | | |
| GI | | | | | |



AB Staurosporine dimers RNMeCXNHX1NHCXNMeR [R = staurosporine; X = O, S; X1 = alkylene] and K-252a derivs. were prepd. for use as protein kinase inhibitors for treatment of neurol. disorders. Thus, K-252a analog I

[R1 = CHO, R2 = Ac] was reduced to I [R = CH2OH] which was treated with EtSH and deacetylated to give I [R1 = CH2SEt, R2 = H, II]. II attenuated the decrease in cholinergic function in the frontal cortex with induced lesions. Choline acetyltransferase in undamaged frontal cortex was unaffected by II.

IT 118735-80-1P 121664-89-9P 121664-90-2P
 121665-11-0P 156177-61-6P 156177-65-0P
 156177-66-1P 156177-73-0P 156177-75-2P
 156177-79-6P 156177-93-4P 167371-04-2P
 167371-06-4P 167371-07-5P 167371-08-6P
 167371-09-7P 167371-10-0P 167371-11-1P
 167371-12-2P 167371-13-3P 167371-14-4P
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 178404-53-0P 178404-54-1P 178404-55-2P
 178404-56-3P 178404-64-3P 178404-65-4P
 178404-66-5P 178404-68-7P 178404-74-5P

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of K-252a analogs as protein kinase inhibitors)

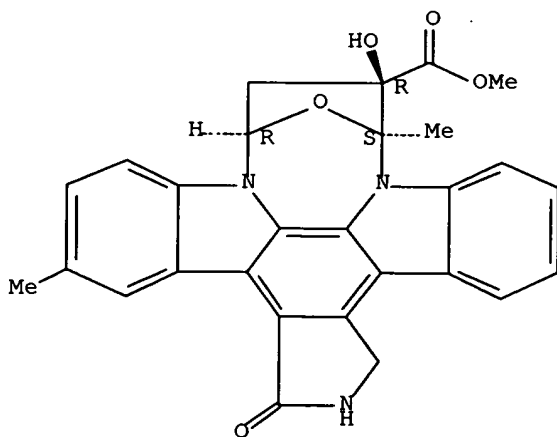
RN 118735-80-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9,16-dimethyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA

INDEX

NAME)

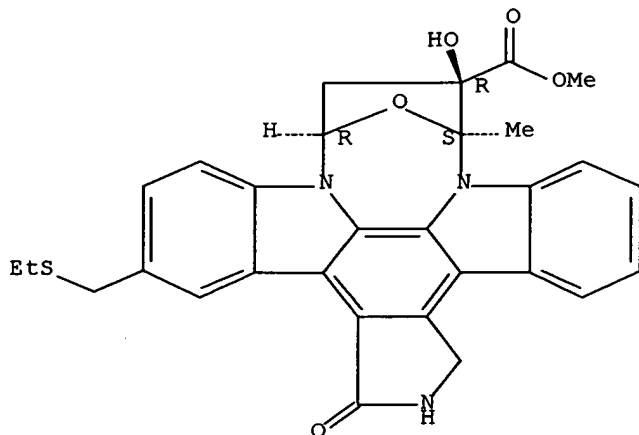
Absolute stereochemistry.



RN 121664-89-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

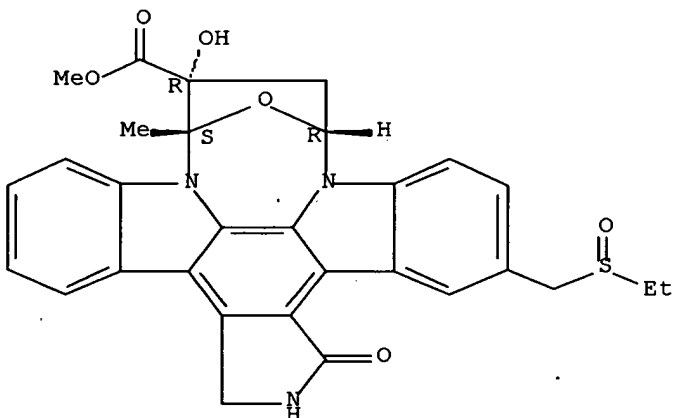
Absolute stereochemistry.



RN 121664-90-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfinyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

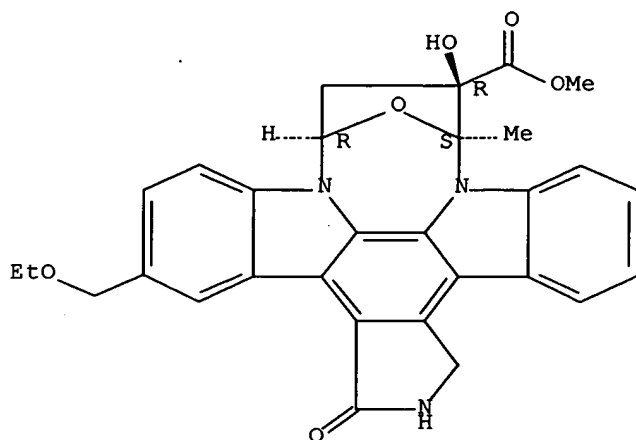
Absolute stereochemistry.



RN 121665-11-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

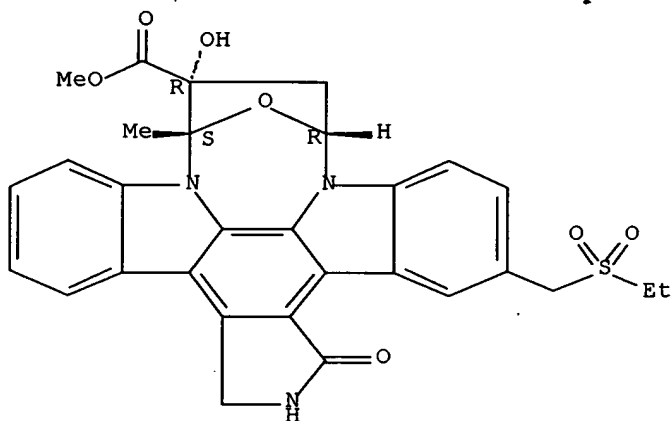
Absolute stereochemistry.



RN 156177-61-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfonyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

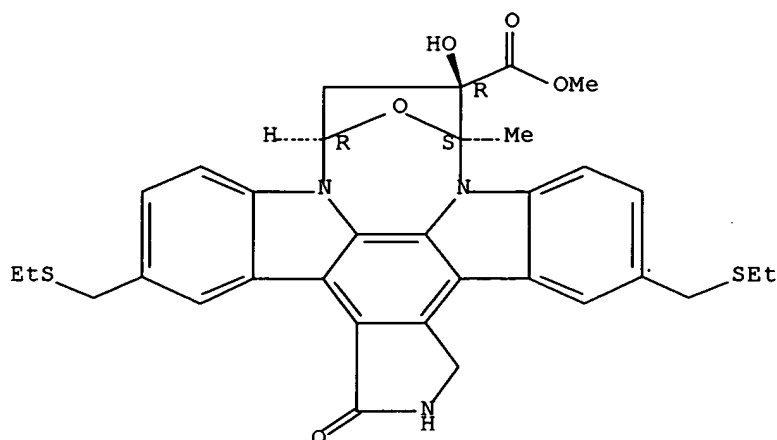
Absolute stereochemistry.



RN 156177-65-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

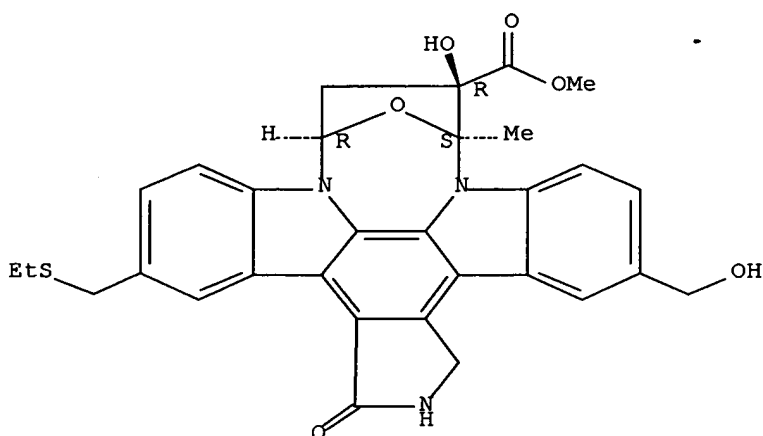
Absolute stereochemistry.



RN 156177-66-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

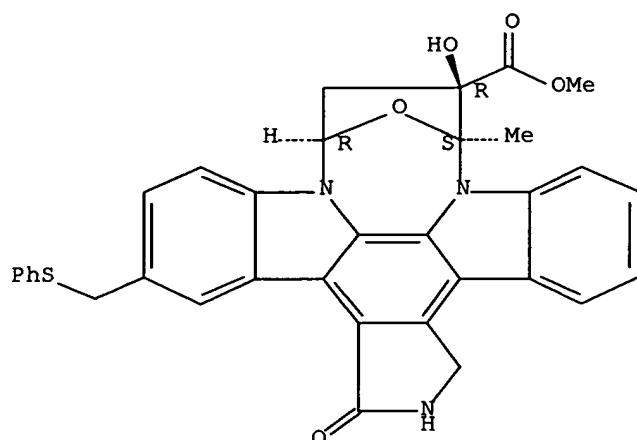
Absolute stereochemistry.



RN 156177-73-0 CAPLUS

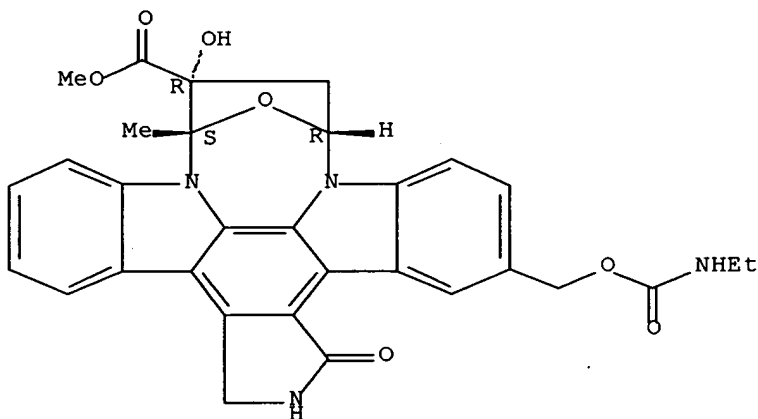
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(phenylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



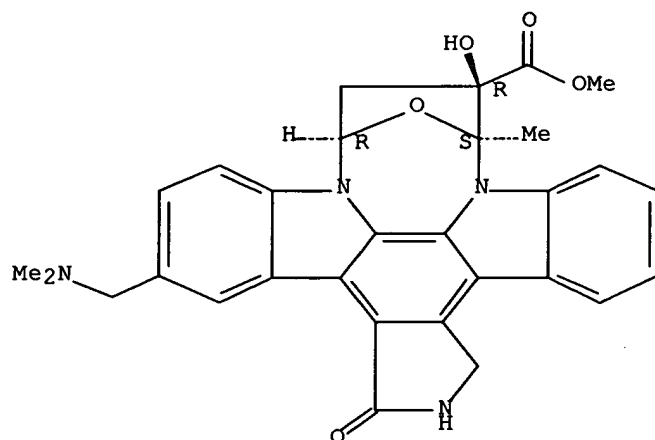
RN 156177-75-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[(ethylamino)carbonyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



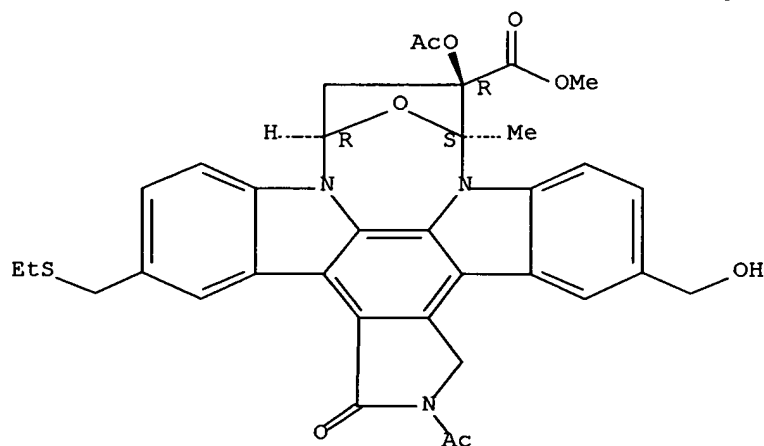
RN 156177-79-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(dimethylamino)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



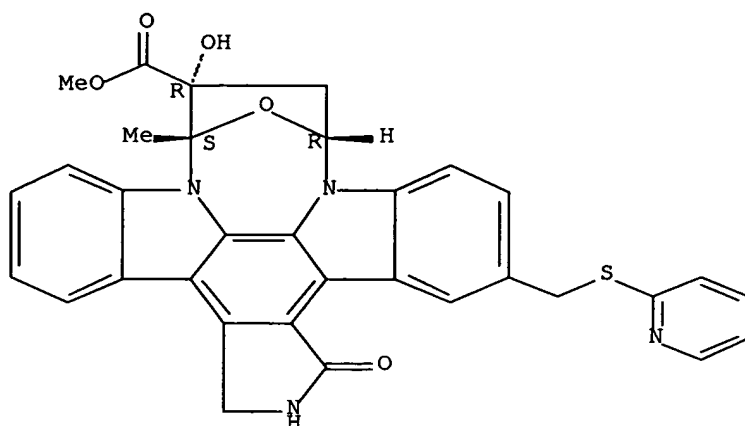
RN 156177-93-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 167371-04-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyridinylthio)methyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

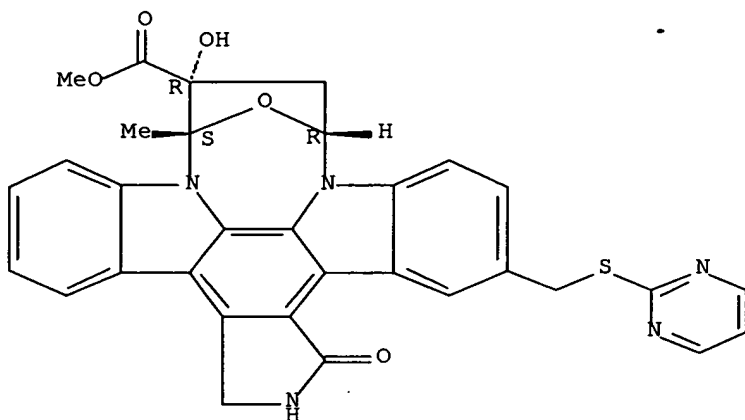
Absolute stereochemistry.



RN 167371-06-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyrimidinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

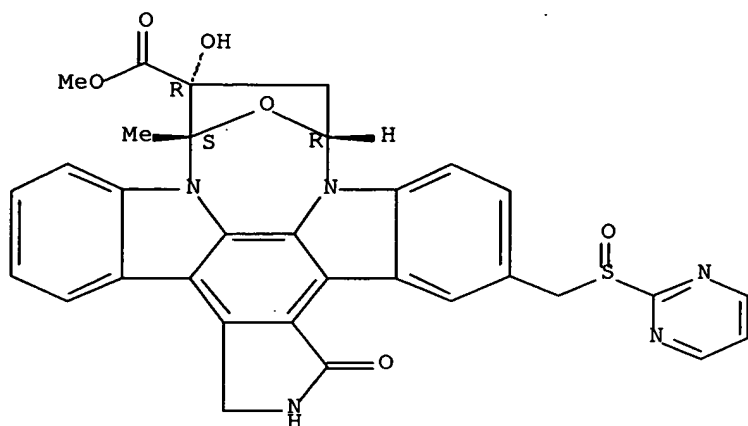
Absolute stereochemistry.



RN 167371-07-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyrimidinylsulfinyl)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

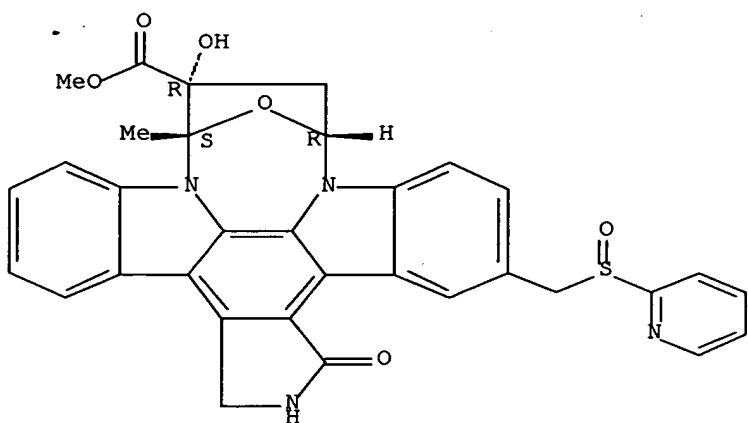
Absolute stereochemistry.



RN 167371-08-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyridinylsulfinyl)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

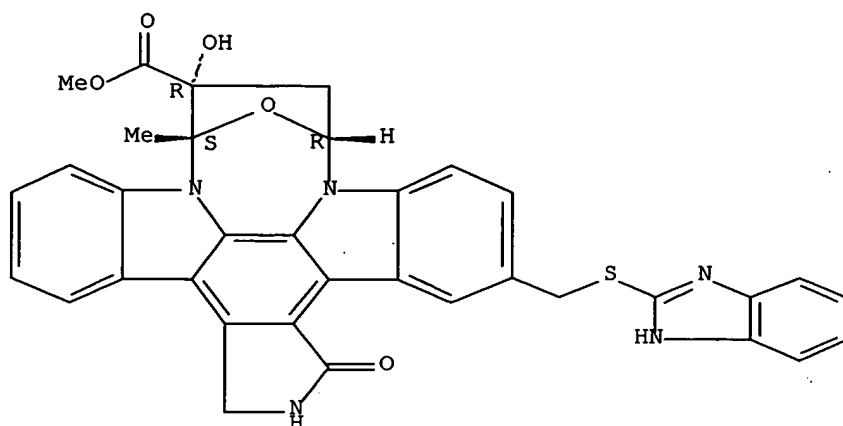
Absolute stereochemistry.



RN 167371-09-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(1H-benzimidazol-2-ylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

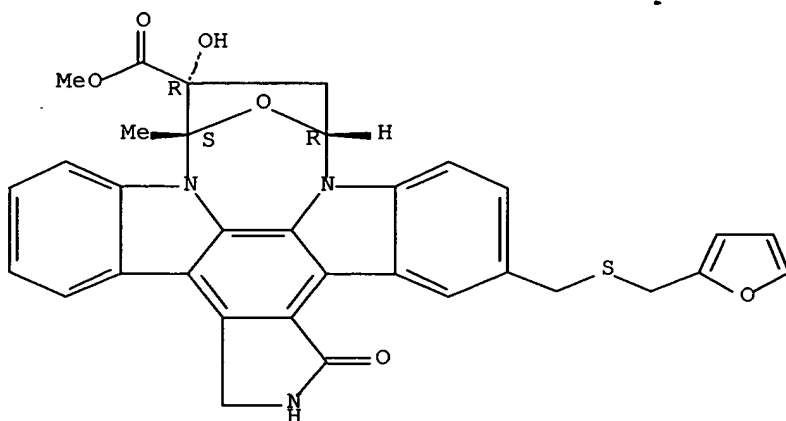
Absolute stereochemistry.



RN 167371-10-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[2-furanylmethyl)thio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

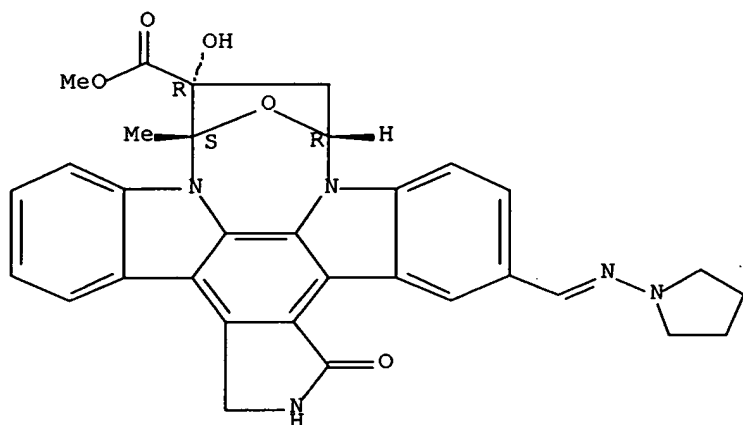


RN 167371-11-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1-pyrrolidinylimino)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

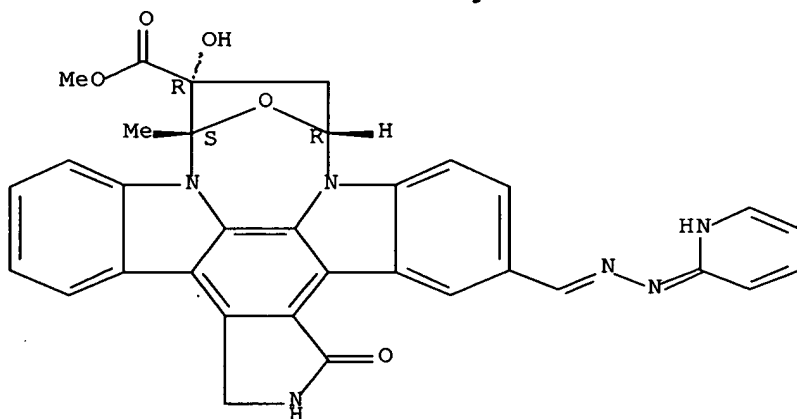


RN 167371-12-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyridinylhydrazono)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

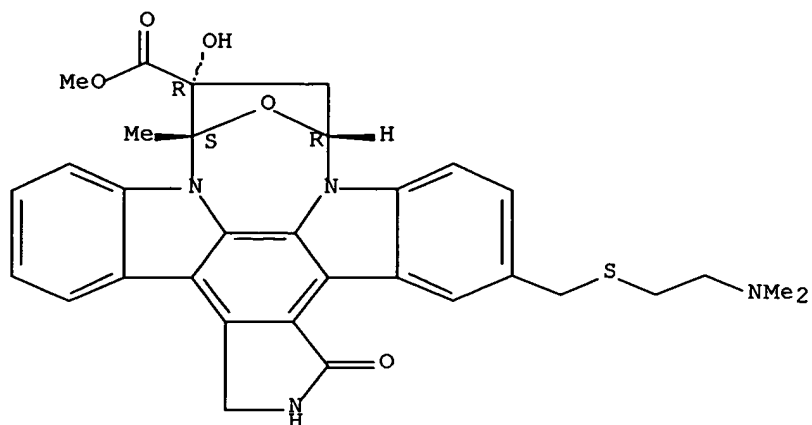
Double bond geometry unknown.



RN 167371-13-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

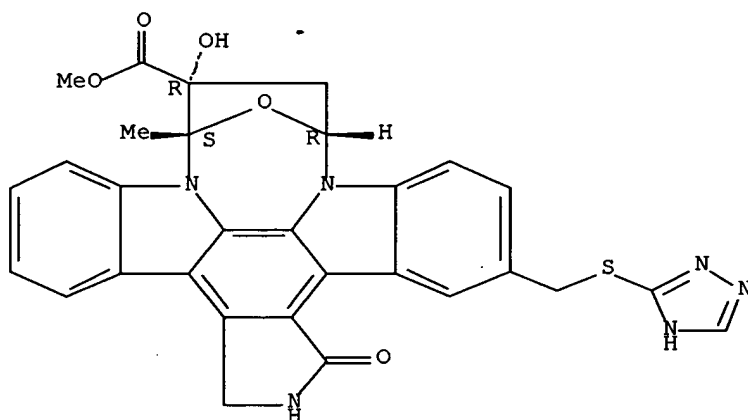
Absolute stereochemistry.



RN 167371-14-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1H-1,2,4-triazol-3-ylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

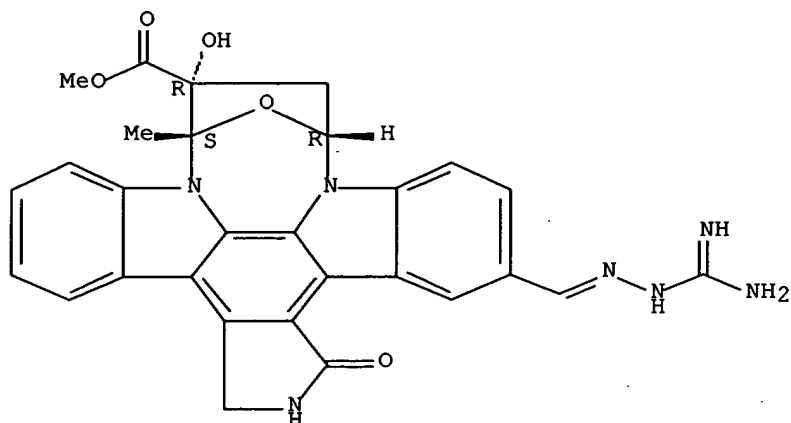


RN 167371-15-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[(aminoiminomethyl)hydrazono]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

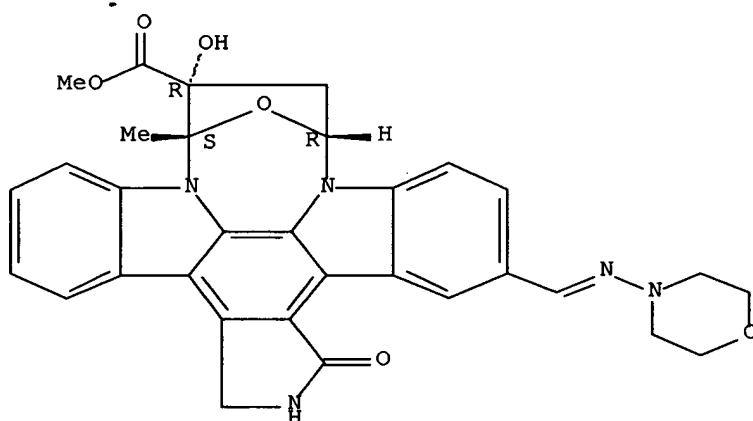


RN 167371-16-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-16-[(4-morpholinylimino)methyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

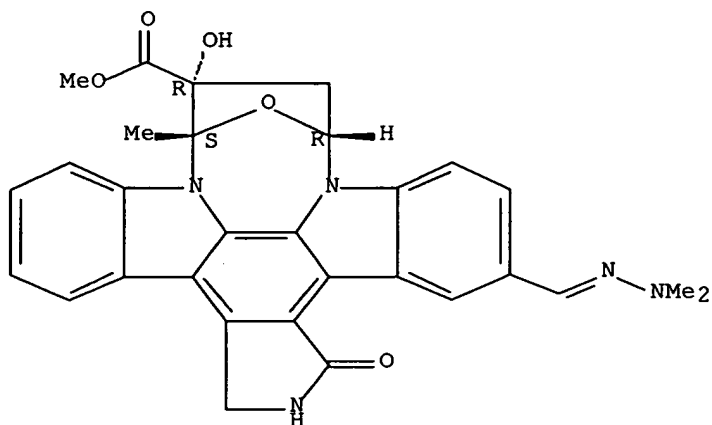


RN 167371-17-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(dimethylhydrazono)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

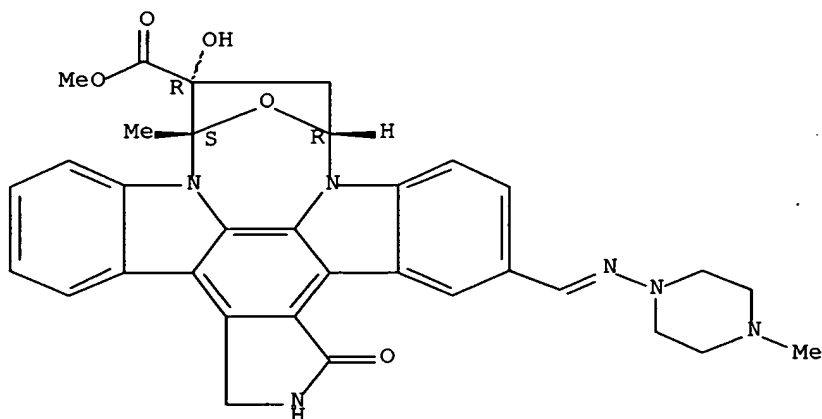
Absolute stereochemistry.

Double bond geometry unknown.



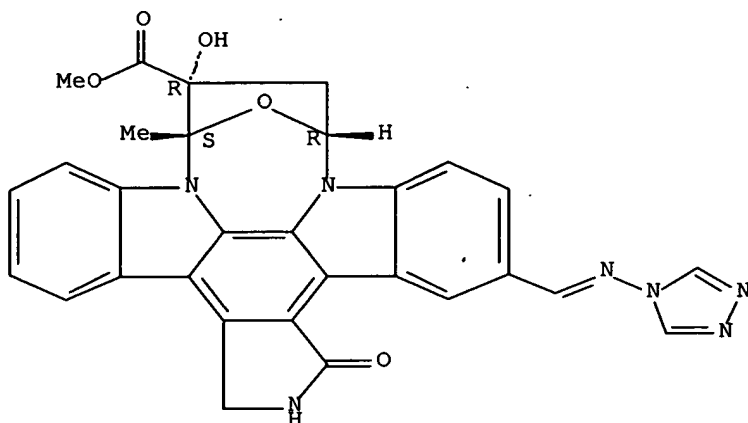
RN 167371-18-8 CAPLUS
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Absolute stereochemistry.
 Double bond geometry unknown.



RN 178404-41-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(4H-1,2,4-triazol-4-ylimino)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

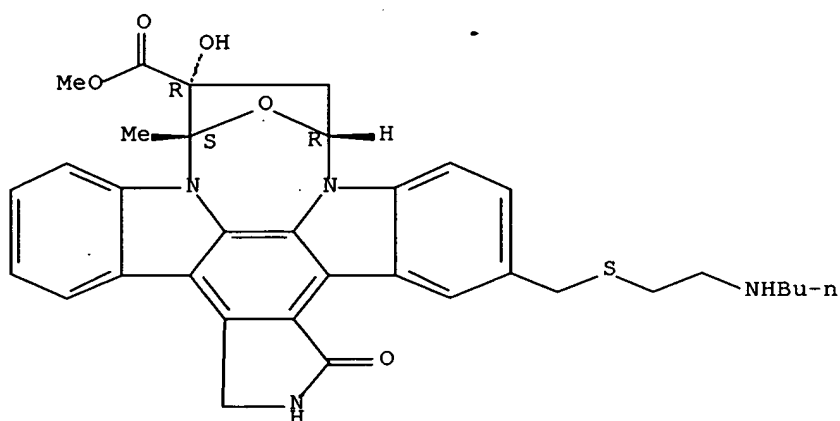
Absolute stereochemistry.
 Double bond geometry unknown.



RN 178404-43-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[2-(butylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

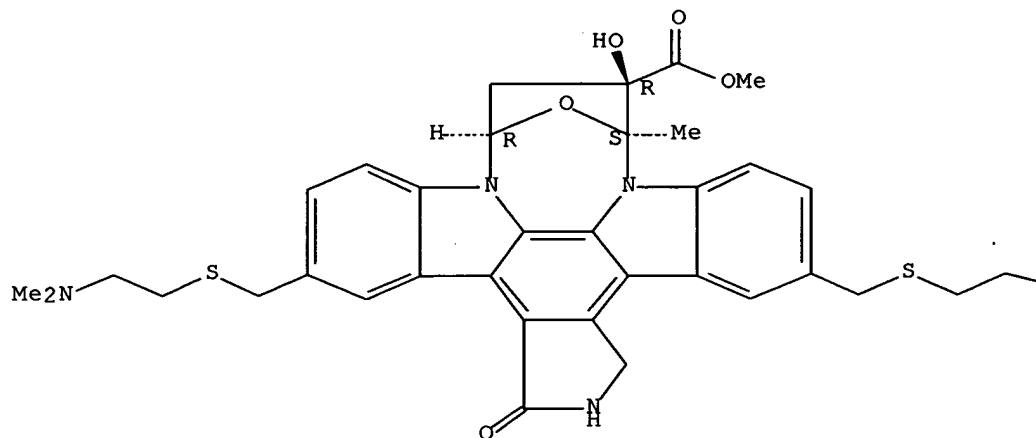
Absolute stereochemistry.



RN 178404-45-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

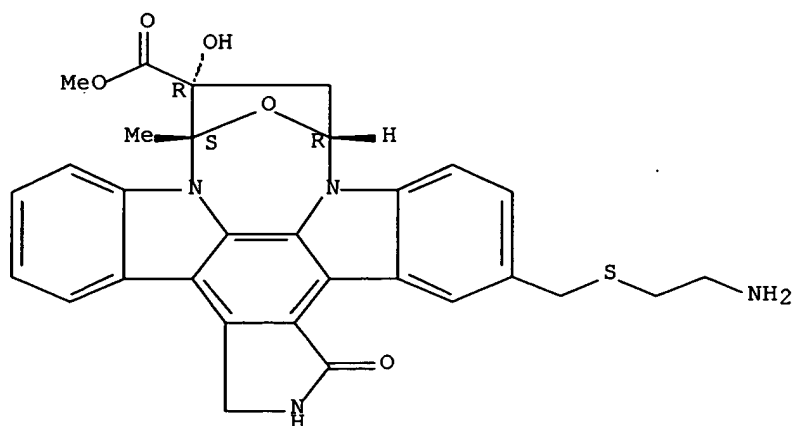
Absolute stereochemistry.



—NMe₂

RN 178404-47-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[2-aminoethyl)thio]methyl]-
 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

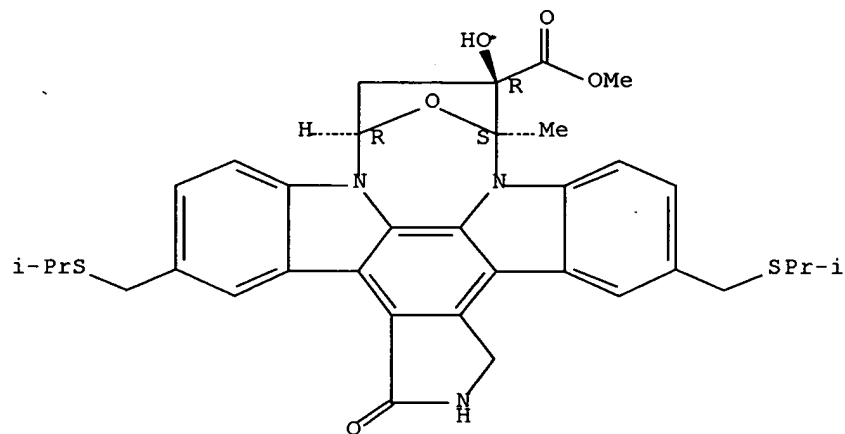
Absolute stereochemistry.



RN 178404-52-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[(1-methylethyl)thio]methyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

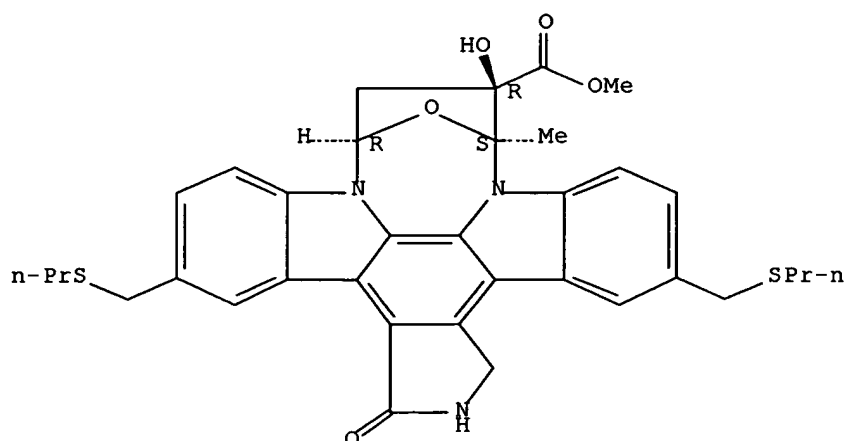
Absolute stereochemistry.



RN 178404-53-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(propylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

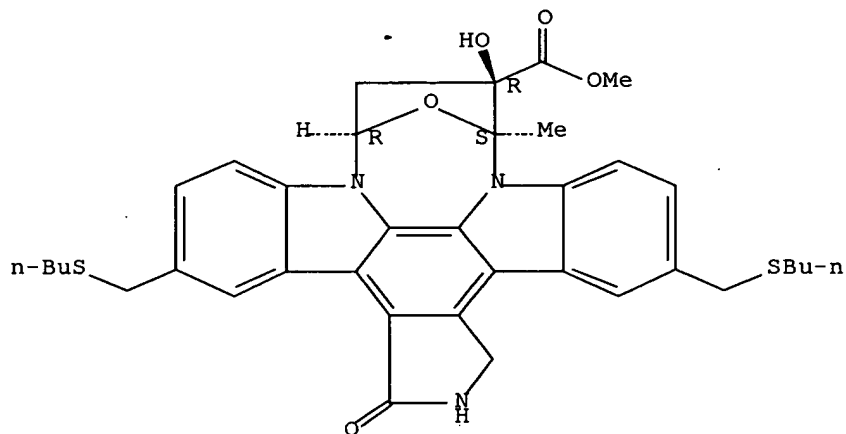
Absolute stereochemistry.



RN 178404-54-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(butylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

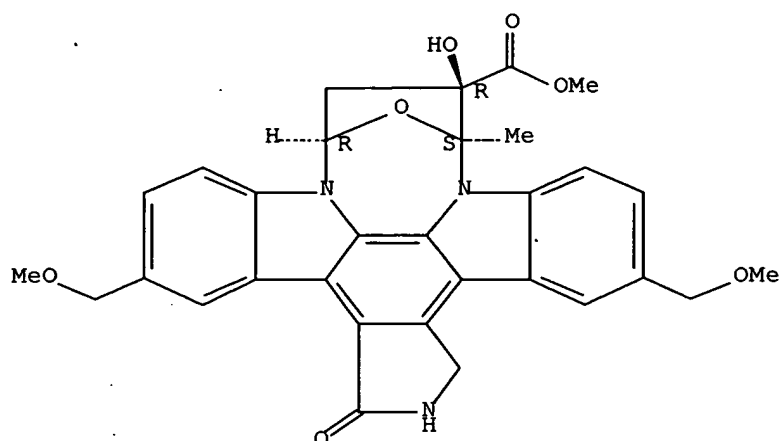
Absolute stereochemistry.



RN 178404-55-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(methoxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

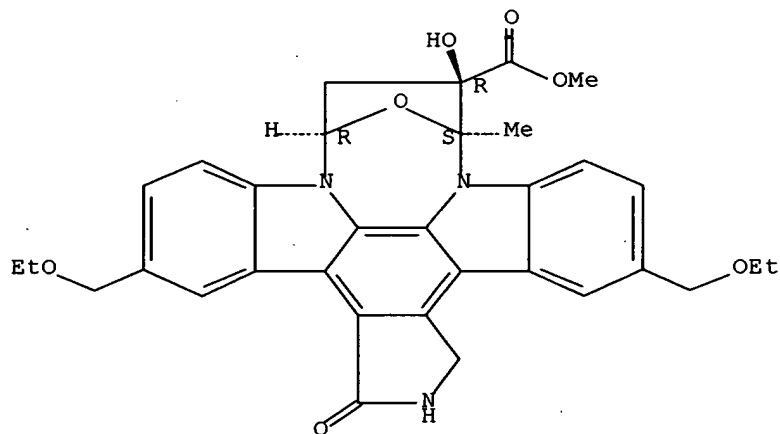
Absolute stereochemistry.



RN 178404-56-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

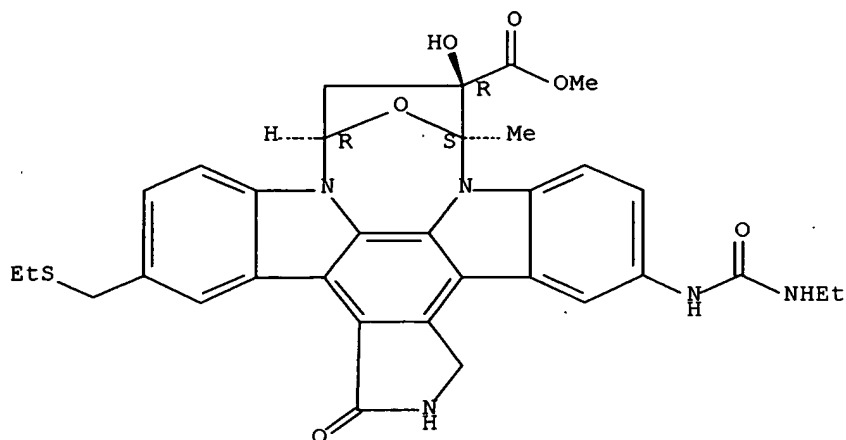
Absolute stereochemistry.



RN 178404-64-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[[(ethylamino) carbonyl] amino]-16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

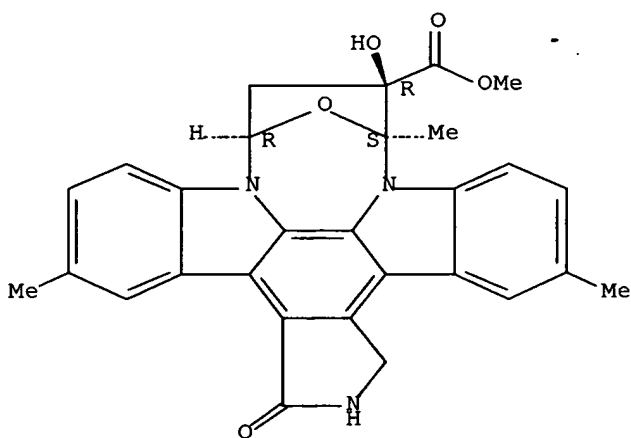
Absolute stereochemistry.



RN 178404-65-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,9,16-trimethyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

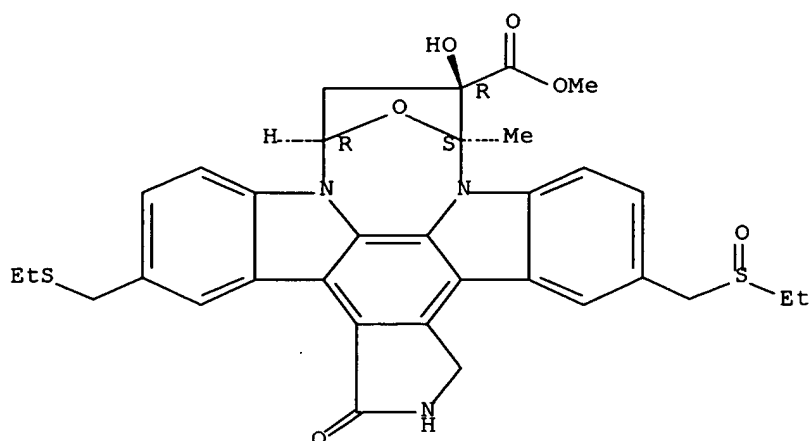
Absolute stereochemistry.



RN 178404-66-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[(ethylsulfinyl)methyl]-16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

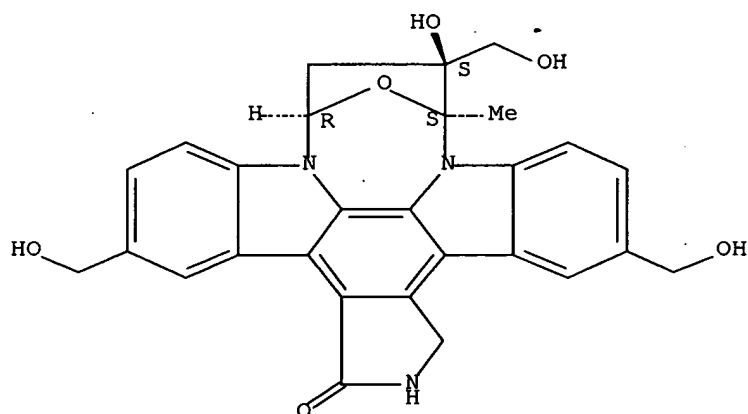
Absolute stereochemistry.



RN 178404-68-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocin-1-one, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,10,16-tris(hydroxymethyl)-9-methyl-, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

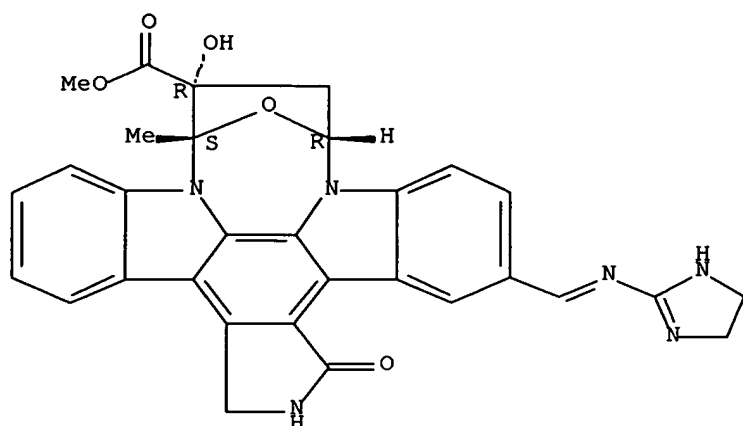


RN 178404-74-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[4,5-dihydro-1H-imidazol-2-yl]imino]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.



IT 118777-59-6 118777-60-9 121664-78-6

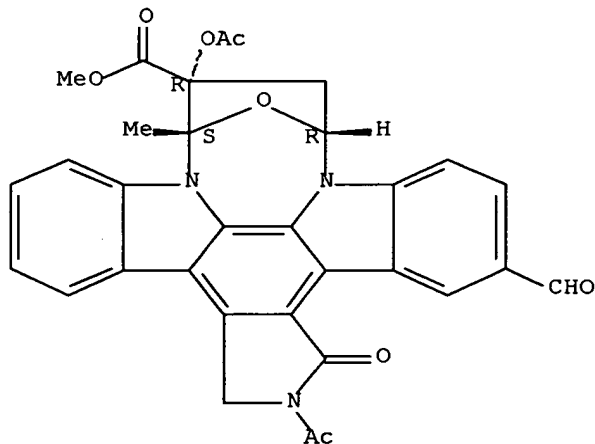
178404-67-6

RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of K-252a analogs as protein kinase inhibitors)

RN 118777-59-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

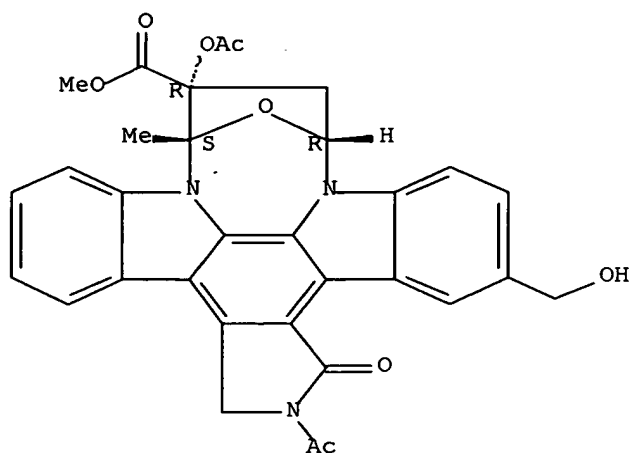
Absolute stereochemistry.



RN 118777-60-9 CAPLUS

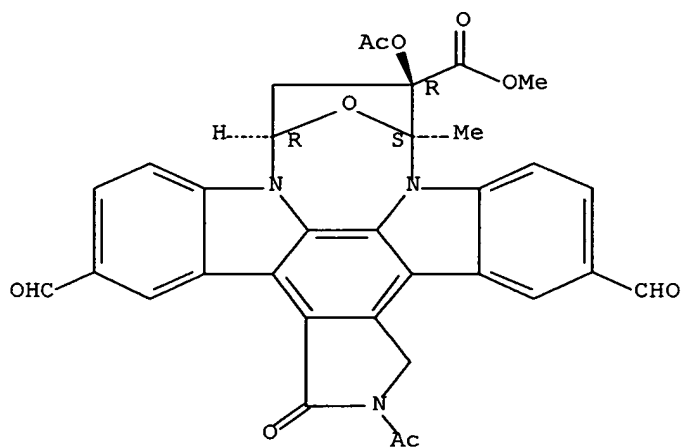
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



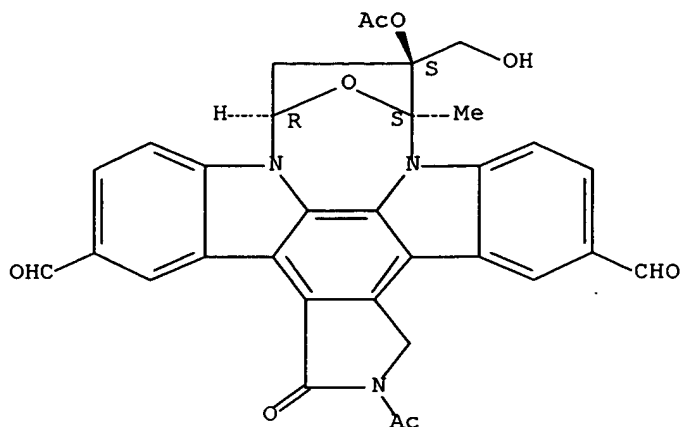
RN 121664-78-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-diformyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 178404-67-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-5,16-dicarboxaldehyde, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-10-(hydroxymethyl)-9-methyl-1-oxo-, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 156177-91-2P 167370-76-5P 167370-77-6P
 167370-78-7P 167370-79-8P 167370-80-1P
 167370-81-2P 167370-82-3P 167370-83-4P
 167370-84-5P 167370-85-6P 173829-96-4P
 178404-40-5P 178404-42-7P 178404-44-9P
 178404-46-1P 178404-57-4P 178404-61-0P
 178404-62-1P 178404-63-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

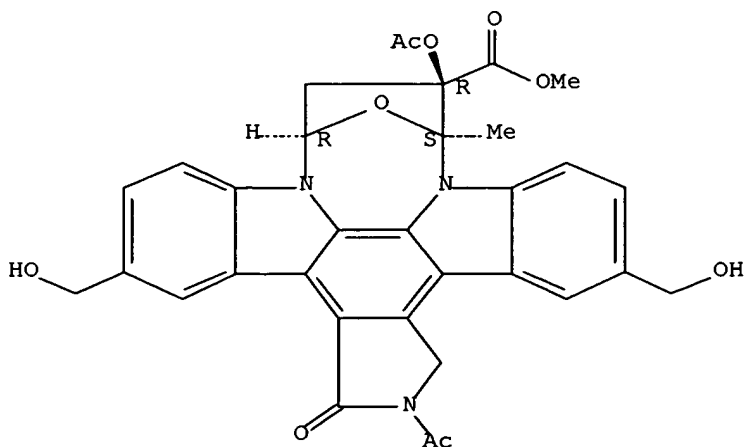
(Reactant or reagent)

(prepn. of K-252a analogs as protein kinase inhibitors)

RN 156177-91-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

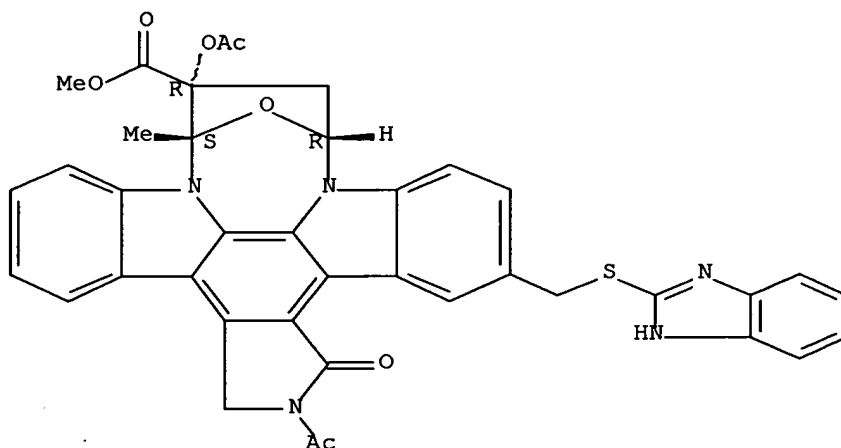


RN 167370-76-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-

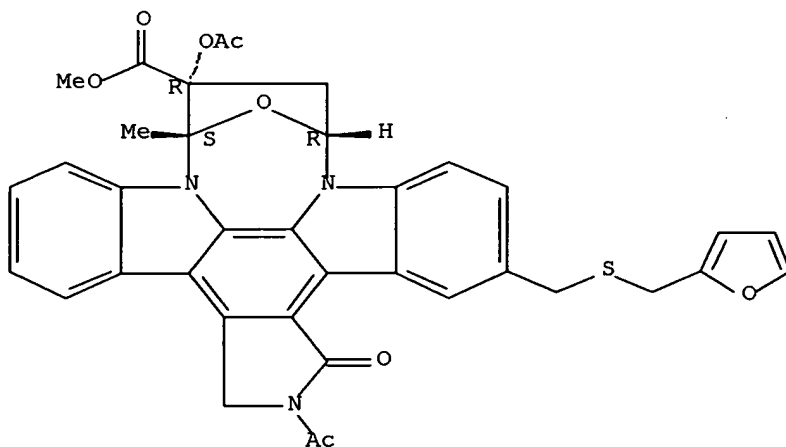
[(1H-benzimidazol-2-ylthio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



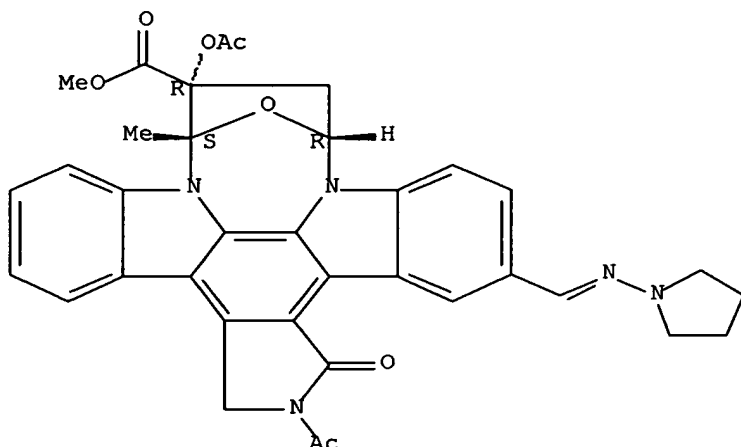
RN 167370-77-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(2-furanylmethyl)thio]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



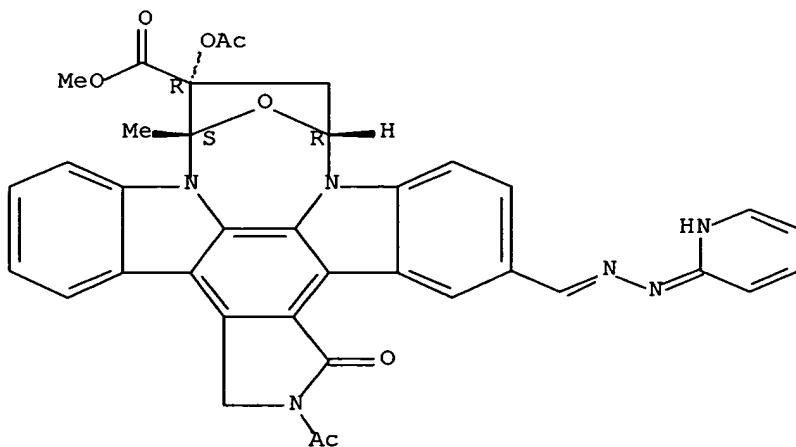
RN 167370-78-7 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(1-pyrrolidinylimino)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



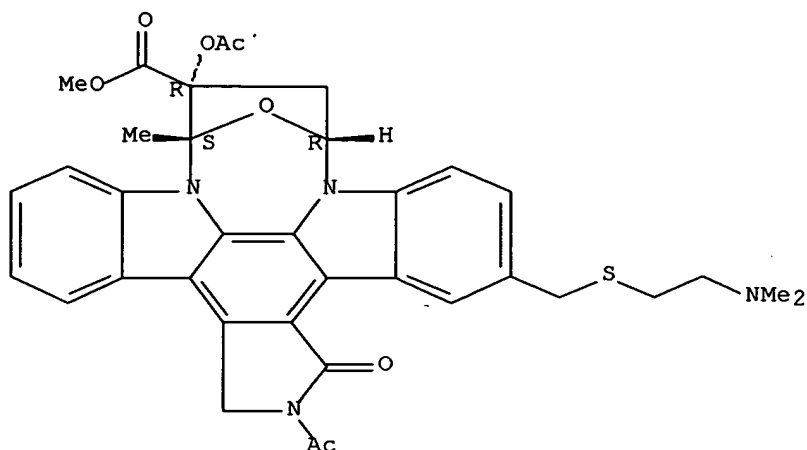
RN 167370-79-8 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(2-pyridinylhydrazono)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



RN 167370-80-1 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

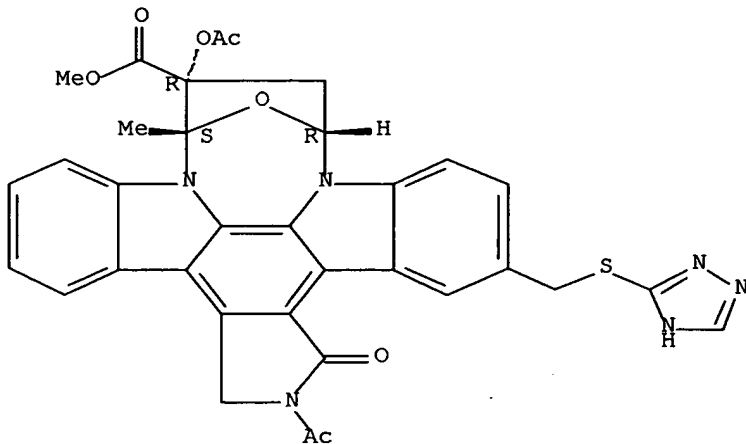
Absolute stereochemistry.



RN 167370-81-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(1H-1,2,4-triazol-3-ylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

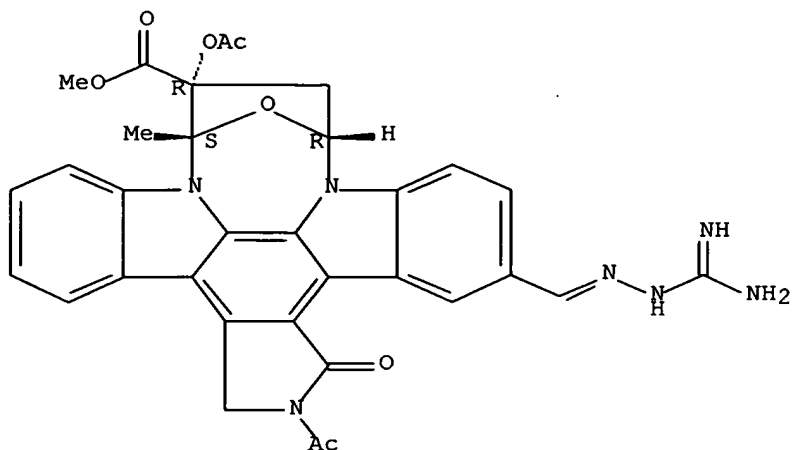


RN 167370-82-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[aminoiminomethyl]hydrazono]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

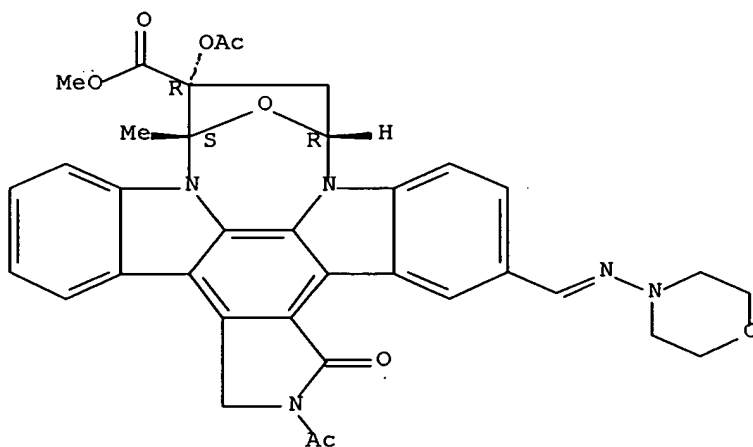


RN 167370-83-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-16-[(4-morpholinylimino)methyl]-1-oxo-methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

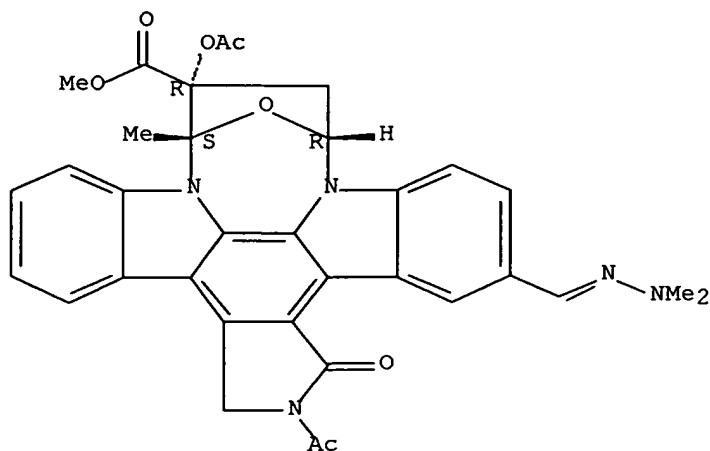


RN 167370-84-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(dimethylhydrazono)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

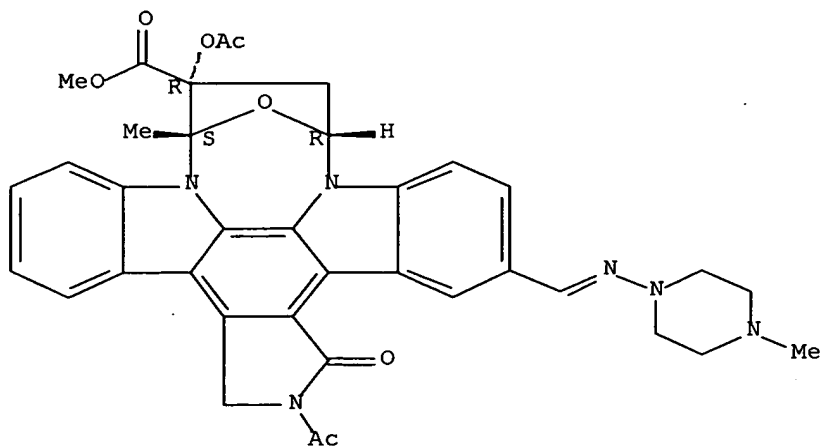
Double bond geometry unknown.



RN 167370-85-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-16-[[4-methyl-1-piperazinyl]imino]methyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

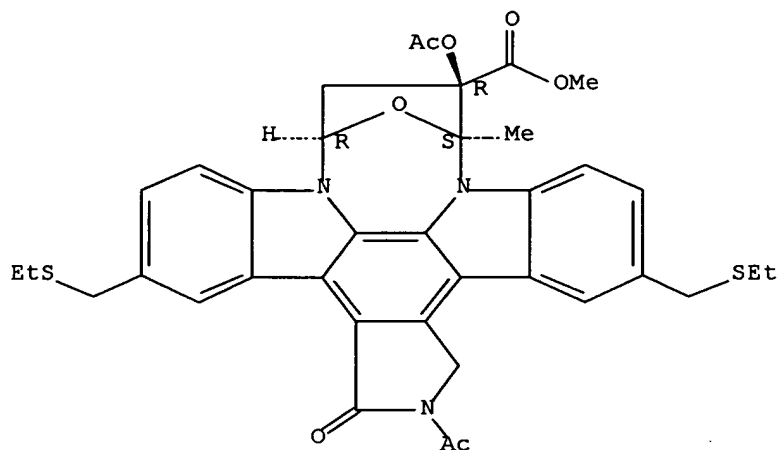
Absolute stereochemistry.
Double bond geometry unknown.



RN 173829-96-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

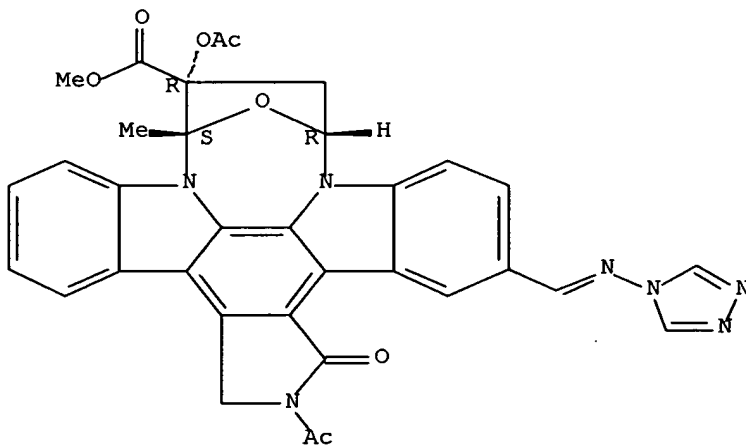


RN 178404-40-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(4H-1,2,4-triazol-4-ylimino)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

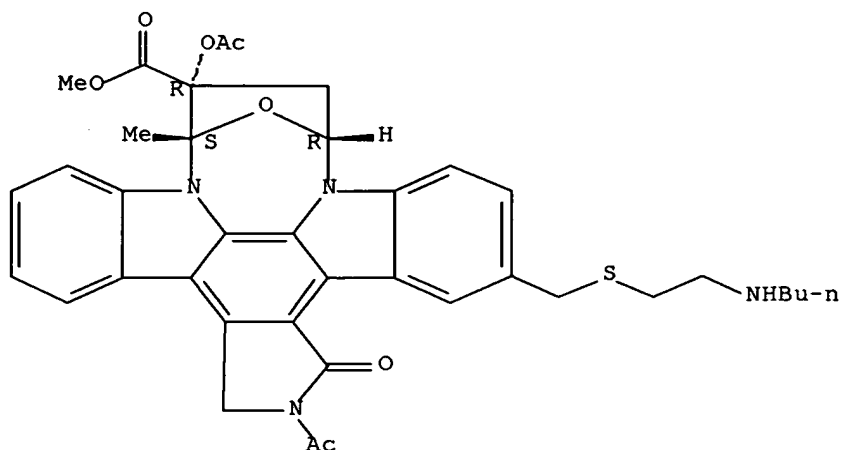
Double bond geometry unknown.



RN 178404-42-7 CAPLUS

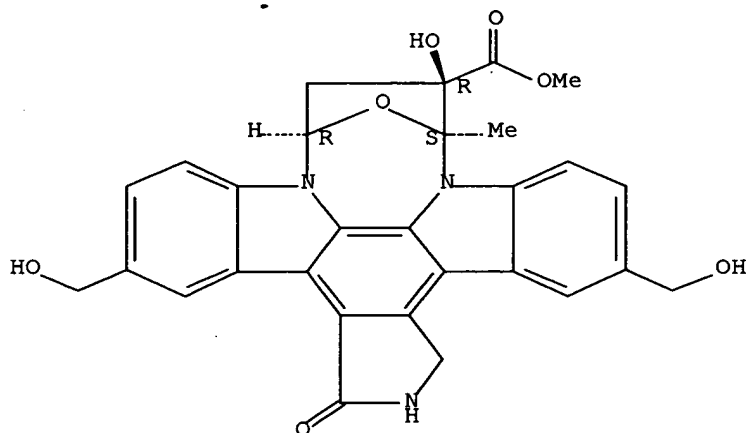
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[[2-(butylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



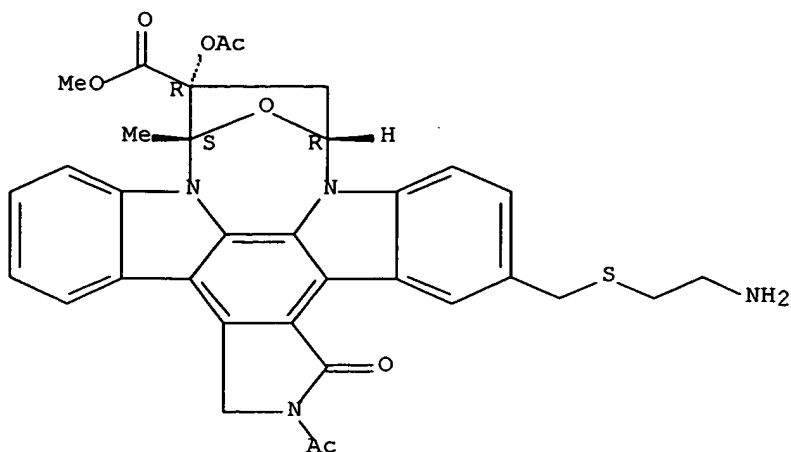
RN 178404-44-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 178404-46-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[2-(2-aminoethylthio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

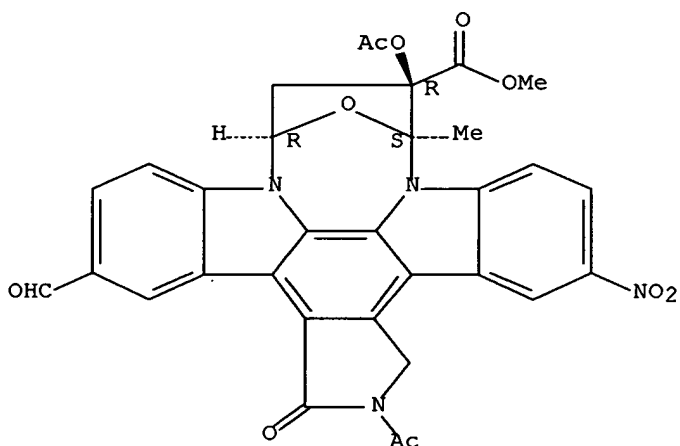
Absolute stereochemistry.



RN 178404-57-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-5-nitro-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

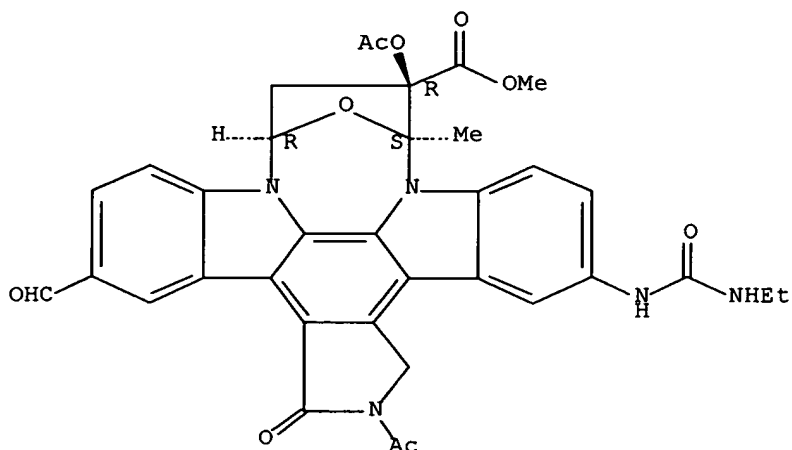
Absolute stereochemistry.



RN 178404-61-0 CAPLUS

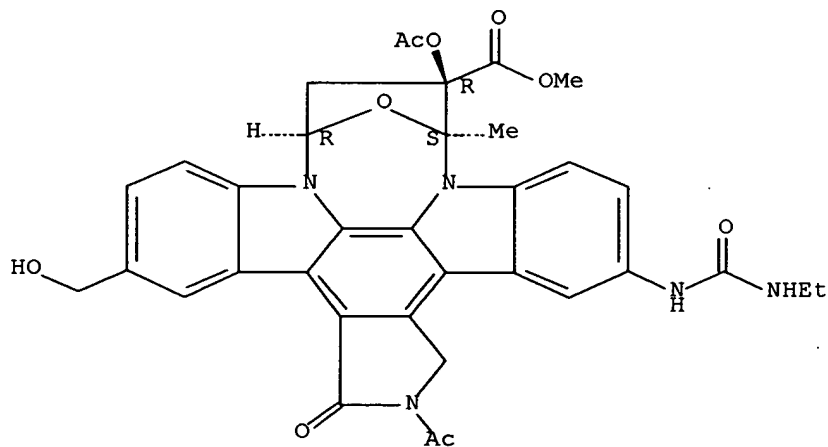
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-[[(ethylamino) carbonyl] amino]-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



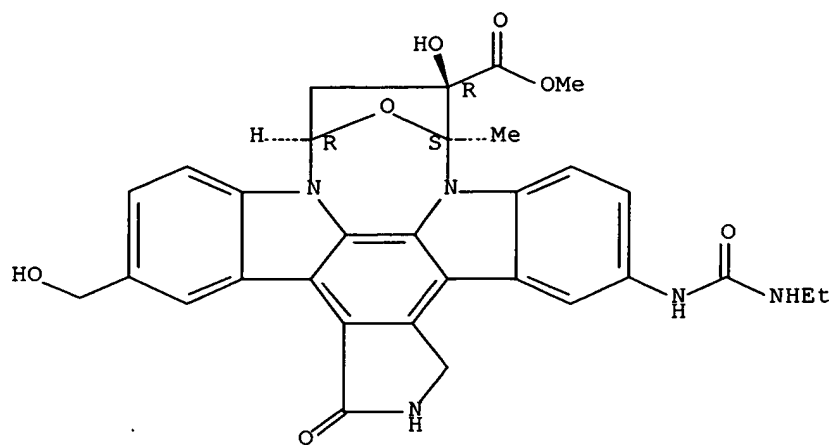
RN 178404-62-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-[[(ethylamino) carbonyl] amino]-2,3,9,10,11,12-hexahydro-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



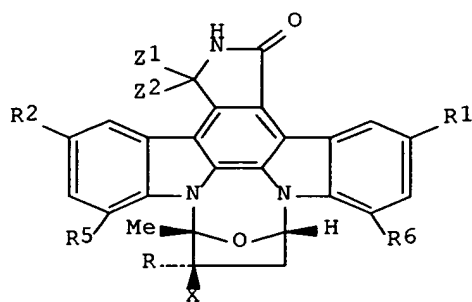
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 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[[(ethylamino) carbonyl] amino]-2,3,9,10,11,12-hexahydro-10-hydroxy-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 45 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1996:350577 CAPLUS
 DN 125:86695
 TI Use of indolocarbazole derivatives to treat a pathological condition of the prostate
 IN Dionne, Craig A.; Contreras, Patricia C.; Murakata, Chikara
 PA Cephalon, Inc., USA; Kyowa Hakko Kogyo Co., Ltd.
 SO U.S., 45 pp., Cont.-in-part of U.S. Ser. No. 96,622, abandoned.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | US 5516771 | A | 19960514 | US 1994-250175 | 19940527 |
| | CA 2163904 | AA | 19941208 | CA 1994-2163904 | 19940527 |
| | EP 839814 | A2 | 19980506 | EP 1998-200023 | 19940527 |
| | EP 839814 | A3 | 19980916 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE | | | | |
| | AT 165097 | E | 19980515 | AT 1994-918168 | 19940527 |
| | ES 2118414 | T3 | 19980916 | ES 1994-918168 | 19940527 |
| | JP 2002356487 | A2 | 20021213 | JP 2002-153049 | 19940527 |
| | US 5654427 | A | 19970805 | US 1995-463680 | 19950605 |
| PRAI | US 1993-69178 | A2 | 19930528 | | |
| | US 1993-96622 | B2 | 19930722 | | |
| | EP 1994-918168 | A3 | 19940527 | | |
| | JP 1995-501026 | A3 | 19940527 | | |
| | US 1994-250175 | A3 | 19940527 | | |
| OS | MARPAT 125:86695 | | | | |
| GI | | | | | |



I

AB The invention features a method of treating a pathol. condition of the prostate gland, e.g., benign prostatic hypertrophy or prostate cancer, in a mammal, said method comprising administering to said mammal a therapeutic amt. of the indolocarbazole compd. K-252a (I; R = OH, R1 = R2 = R5 = R6 = Z1 = Z2 = H, X = CO2Me) or a preferred deriv. thereof. The invention also includes novel derivs. I of K-252a, wherein Z1 = Z2 = H, R is selected from OH, O-alkyl of 1-6 carbons and O-acyl of 2-6 carbons, X is selected from H, CONHPh (with the proviso that both R1 and R2 are not

Br), CH₂Y wherein Y is OR₇ (wherein R₇ is H or acyl of 2-5 carbons, preferably Ac), SOR₈ (wherein R₈ is alkyl of 1-3 carbons, aryl, or a heterocyclic group including a nitrogen), NR₉NR₁₀ (wherein R₉ and R₁₀, independently, are H, alkyl of 1-3 carbons, Pro, Ser, Gly, Lys, or acyl), SR₁₆ (wherein R₁₆ is an aryl, alkyl of 1-3 carbons, or a heterocyclic group including a nitrogen), N₃, CO₂Me, S-glc, CONR₁₁R₁₂ (wherein R₁₁ and R₁₂, independently, are H, alkyl of 1-6 carbons, Ph, hydroxyalkyl of 1-6 carbons, or R₁₁R₁₂ = CH₂CH₂OCH₂CH₂), CO₂Me, CH:NNHCONH₂, CONHOH, CH:NOH, CH:NNHC(:NH)NH₂, CH:NNH-(2-imidazolyl), CH:NN(R₁₇)₂ (wherein R₁₇ = aryl), CH₂NHCONHR₁₈ (wherein R₁₈ is lower alkyl or aryl); X and R combined form CH₂NHCO₂, CH₂OCMe₂O, O, CH₂NMeCO₂. In I, R₁, R₂, R₅, R₆ are, independently, H, up to 2 are F, Cl, Br, iodo, NO₂, CH, OH; NHCONHR₁₃ (wherein R₁₃ is Ph or alkyl of 1-3 carbons, with the proviso that only one of R₁, R₂, R₅, R₆ is NHCONHR₁₃), CH₂OR₁₃ (R₁₃ is alkyl of 1-6 carbons), CH₂OCONHR₁₄, NHC(O)R₁₄ (wherein R₁₄ is lower alkyl), CH(SPh)₂, CH(SCHG₂CH₂S); R₁ = CH₂S(O)pR₂₁ (wherein p = 0, 1 and R₂₁ is aryl, alkyl of 1-3 carbons, a heterocyclic group that includes a nitrogen), or R₂₂R₂₃ = (CH₂)₄, CH₂CH₂OCH₂CH₂, CH₂CH₂NMeCH₂CH₂, with the proviso that R₂₂ and R₂₃ cannot both be H and at least one of R₂₂ or R₂₃ is H, except when both are alkyl and R₂ = R₅ = R₆ = H; when Z₁ and Z₂ are combined to represent O, X = CO₂Me, R = OH, And R₁ = R₂ = R₅ = R₆ = H.

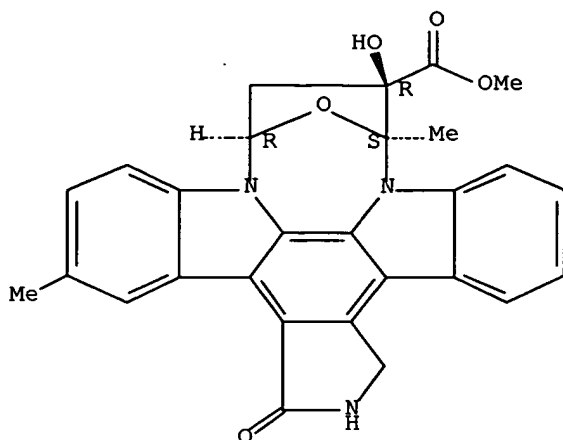
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167371-09-7P 167371-10-0P 167371-11-1P
167371-12-2P 167371-13-3P 167371-14-4P
167371-15-5P 167371-16-6P 167371-17-7P
167371-18-8P 178247-69-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(use of indolocarbazole derivs. to treat a pathol. condition of the prostate)

RN 118735-80-1 CAPLUS

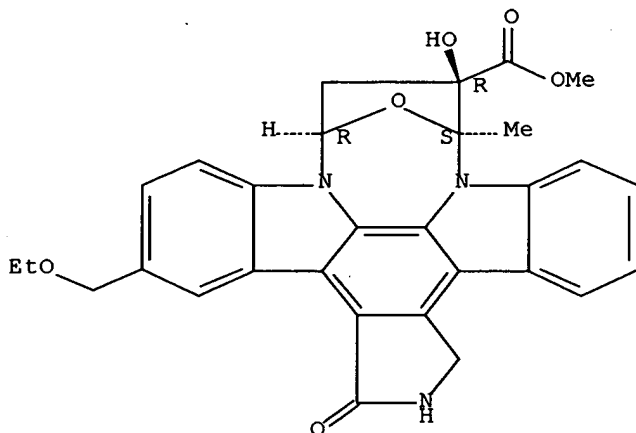
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9,16-dimethyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



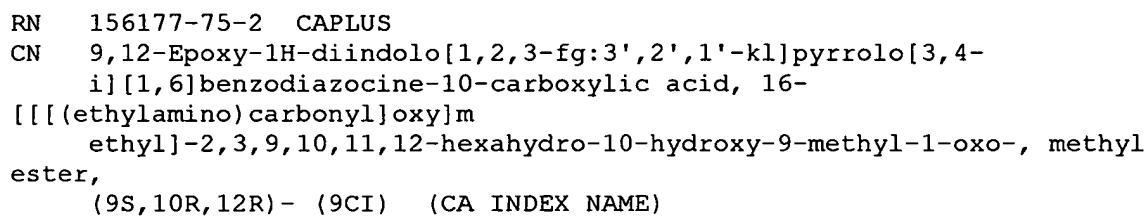
RN 121665-11-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-(ethoxymethyl)-
 2,3,9,10,11,12-
 hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.



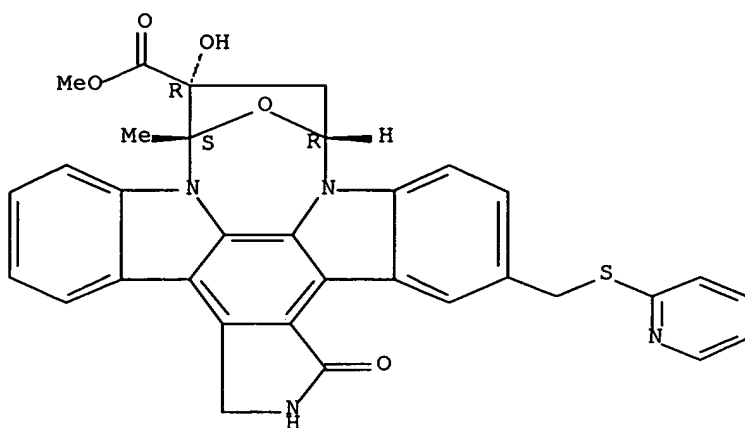
RN 156177-66-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-
 2,3,9,10,11,12-hexahydro-10-hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-,
 methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 167371-04-2 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyridinylthio)methyl]-, methyl ester, (9S,10R,12R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

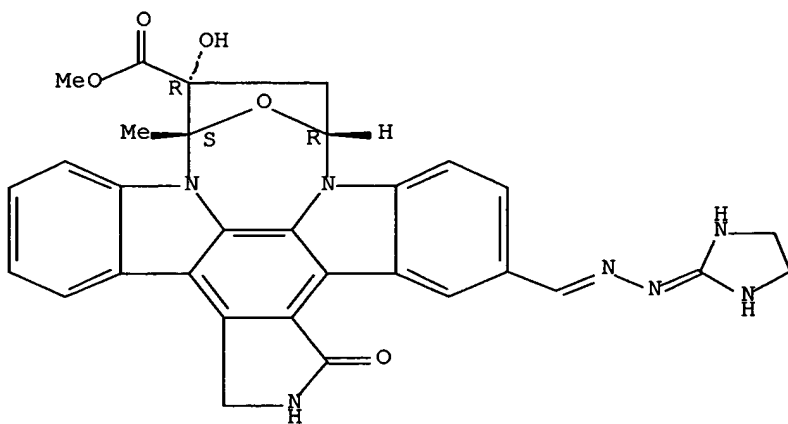


RN 167371-05-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(4,5-dihydro-1H-imidazol-2-yl)hydrazono]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

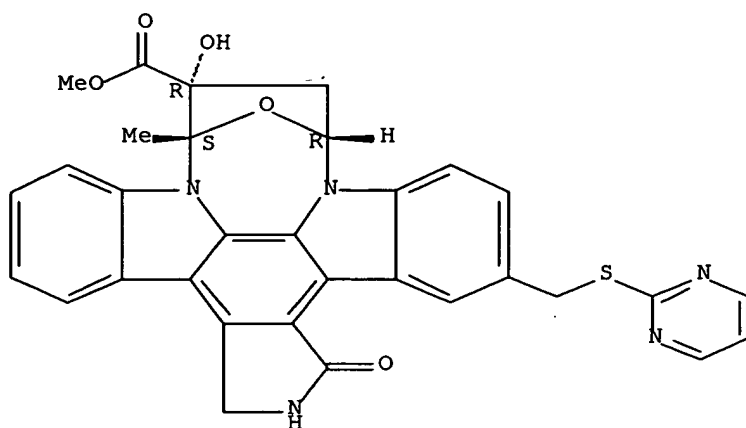
Double bond geometry unknown.



RN 167371-06-4 CAPLUS

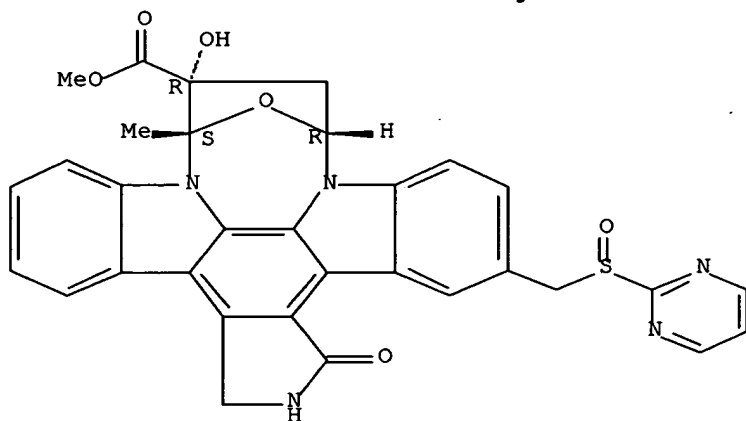
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyrimidinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



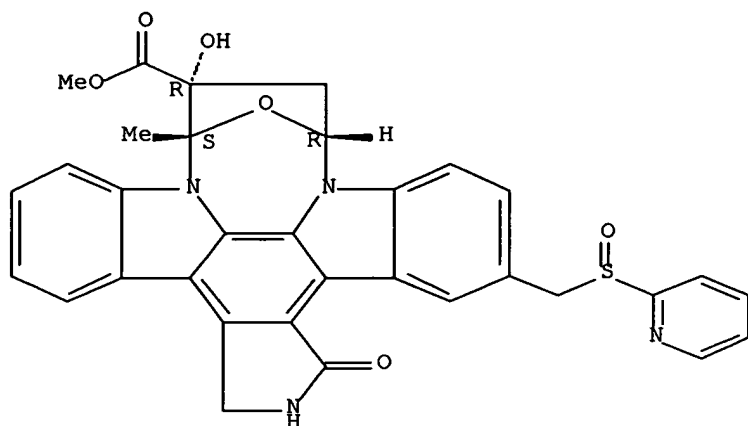
RN 167371-07-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyrimidinylsulfinyl)methyl]-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



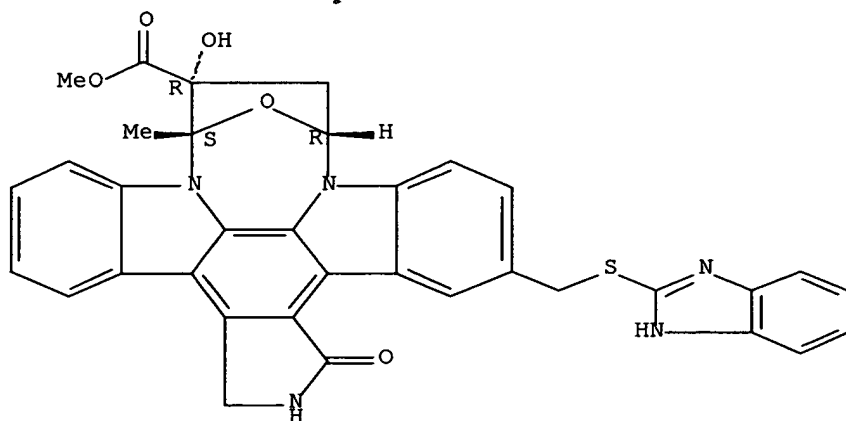
RN 167371-08-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyridinylsulfinyl)methyl]-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



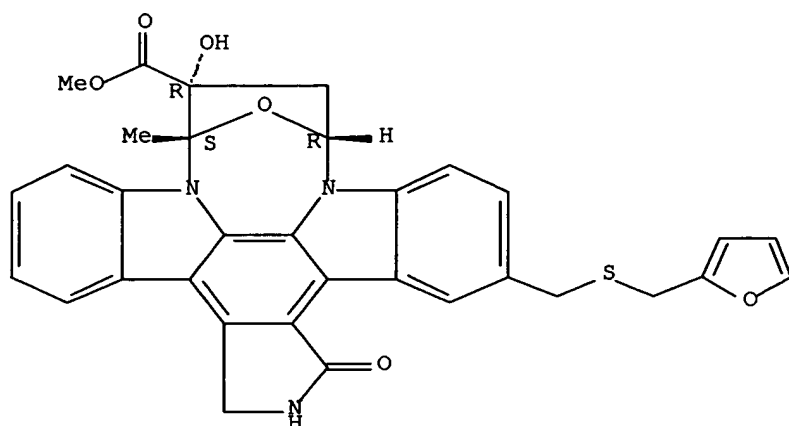
RN 167371-09-7 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(1H-benzimidazol-2-ylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 167371-10-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[2-furanylmethyl)thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

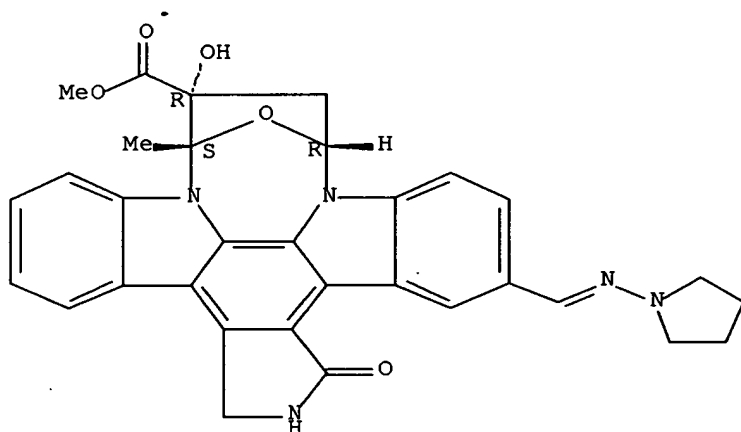


RN 167371-11-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1-pyrrolidinylimino)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

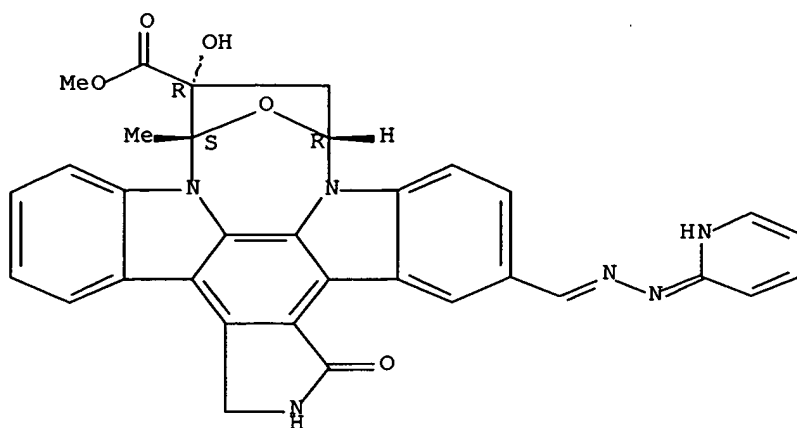


RN 167371-12-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyridinylhydrazono)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

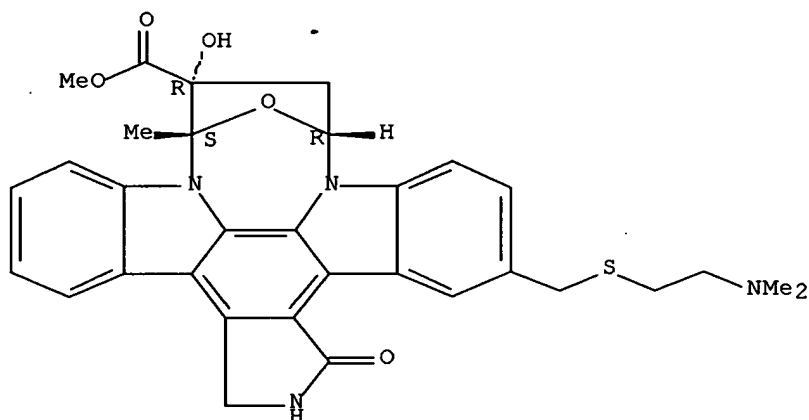
Double bond geometry unknown.



RN 167371-13-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

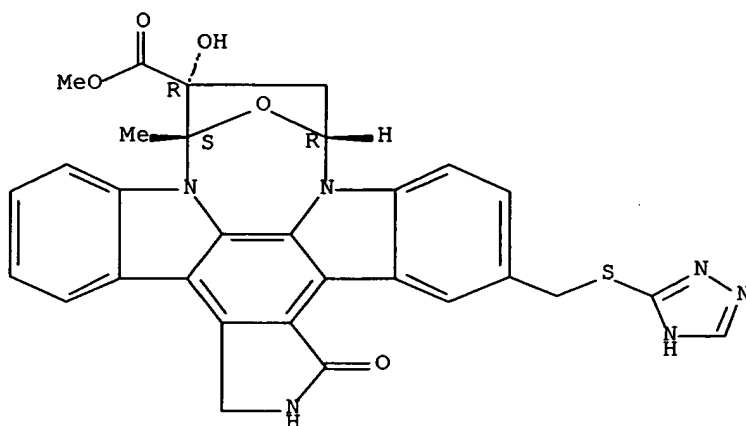
Absolute stereochemistry.



RN 167371-14-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1H-1,2,4-triazol-3-ylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



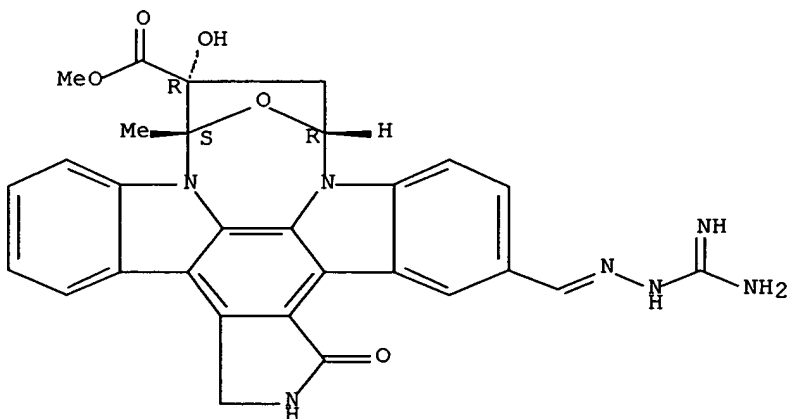
RN 167371-15-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-

[[(aminoiminomethyl)hydrazono]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.



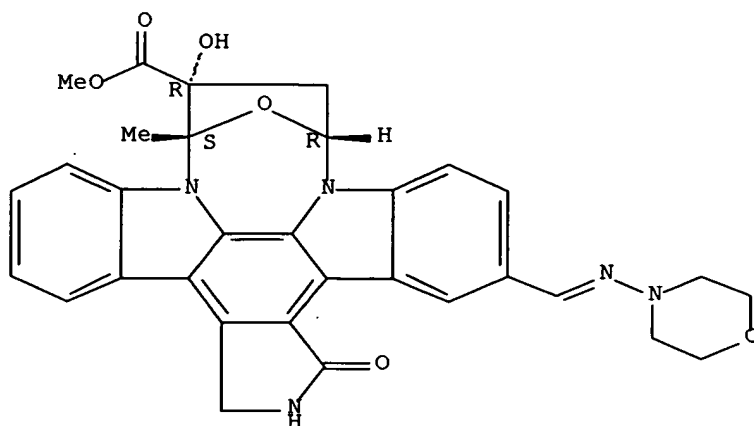
RN 167371-16-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-

hydroxy-9-methyl-16-[(4-morpholinylimino)methyl]-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

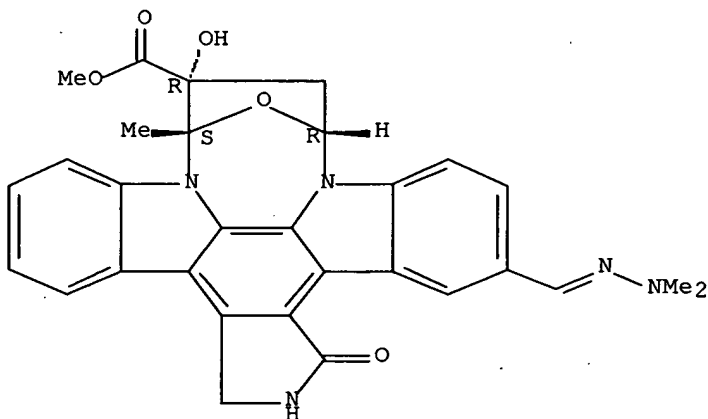


RN 167371-17-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(dimethylhydrazono)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

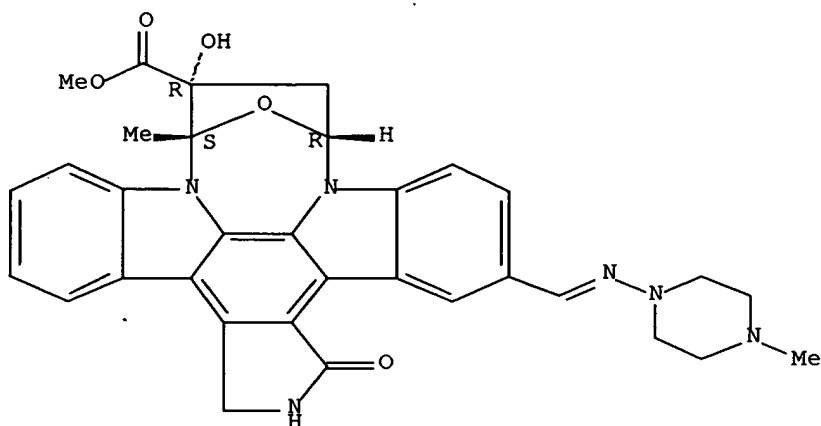


RN 167371-18-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-16-[[(4-methyl-1-piperazinyl) imino]methyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

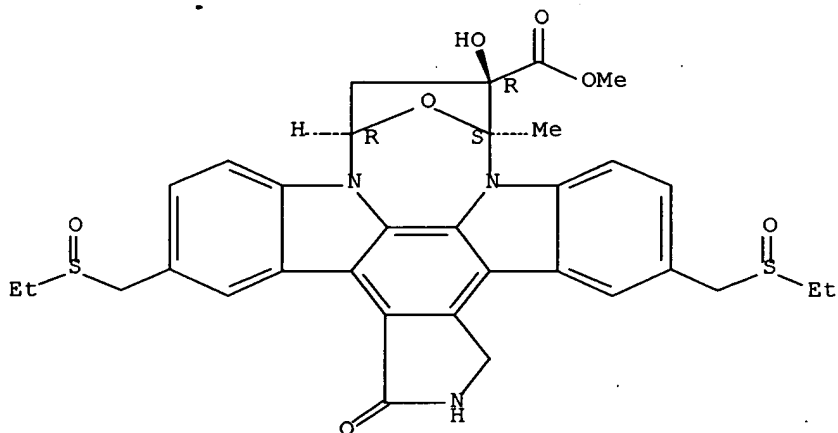
Absolute stereochemistry.

Double bond geometry unknown.



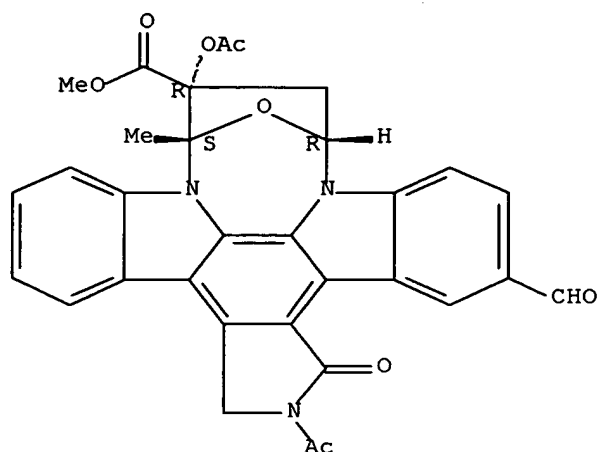
RN 178247-69-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylsulfinyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



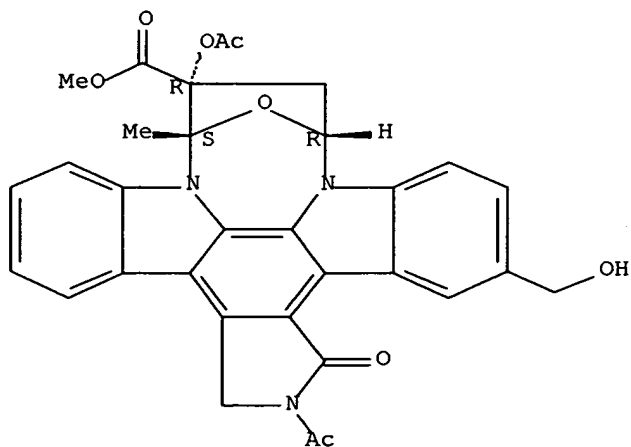
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 RL: RCT (Reactant); RACT (Reactant or reagent)
 (use of indolocarbazole derivs. to treat a pathol. condition of the prostate)
 RN 118777-59-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 118777-60-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 167370-72-1P 167370-76-5P 167370-77-6P
 167370-78-7P 167370-79-8P 167370-80-1P
 167370-81-2P 167370-82-3P 167370-83-4P
 167370-84-5P 167371-02-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

(Reactant or reagent)

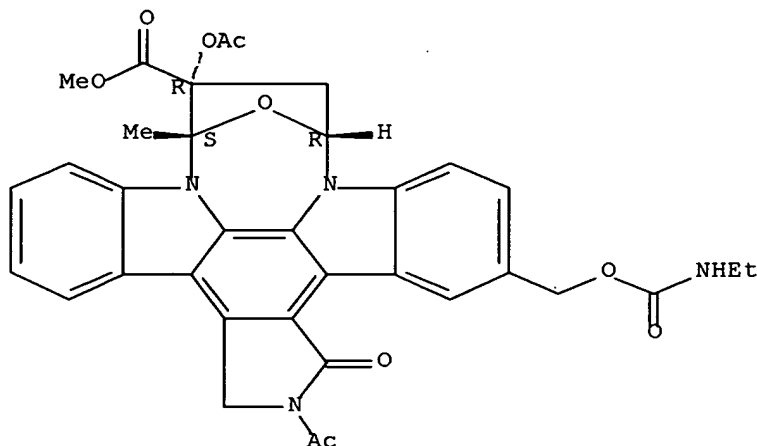
(use of indolocarbazole derivs. to treat a pathol. condition of the prostate)

RN 167370-72-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-

[[[(ethylamino)carbonyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

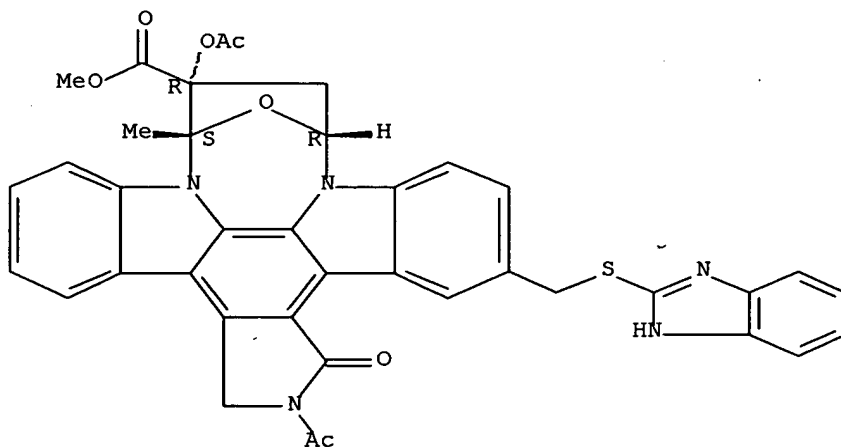
Absolute stereochemistry.



RN 167370-76-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[1H-benzimidazol-2-ylthio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

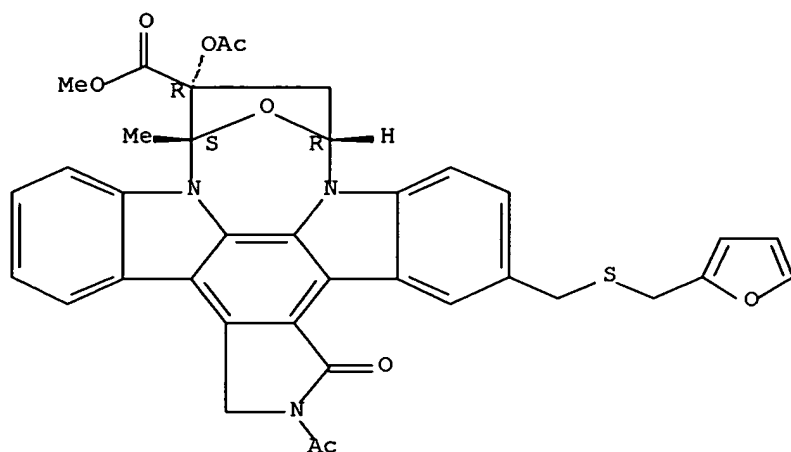
Absolute stereochemistry.



RN 167370-77-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[2-furanylmethyl)thio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

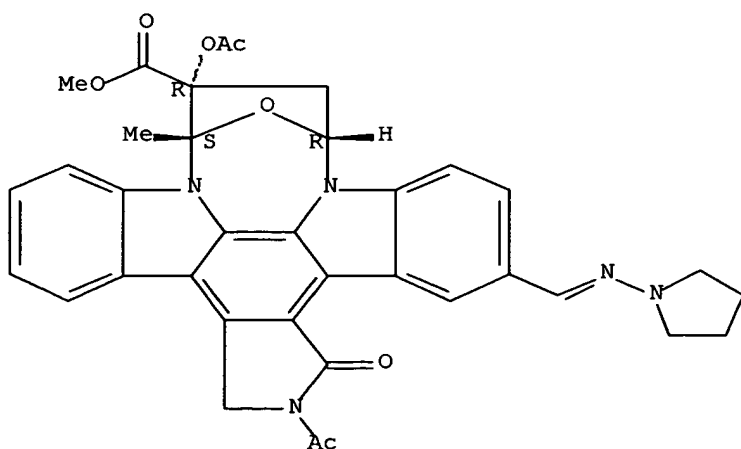


RN 167370-78-7 CAPLUS

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Absolute stereochemistry.

Double bond geometry unknown.

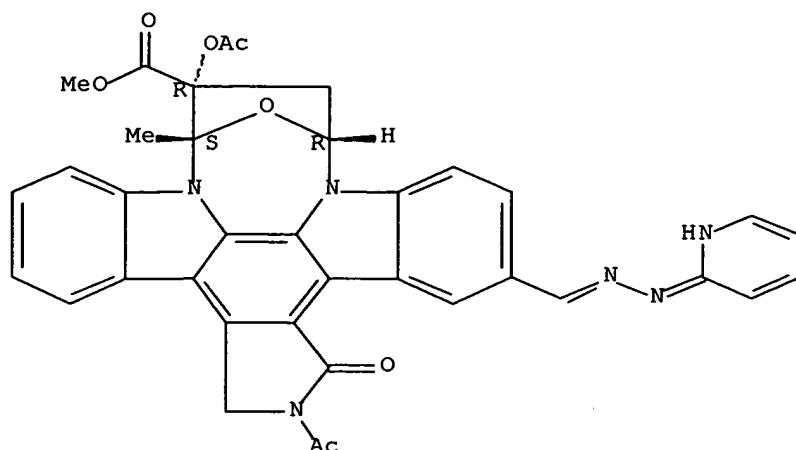


RN 167370-79-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(2-pyridinylhydrazono)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

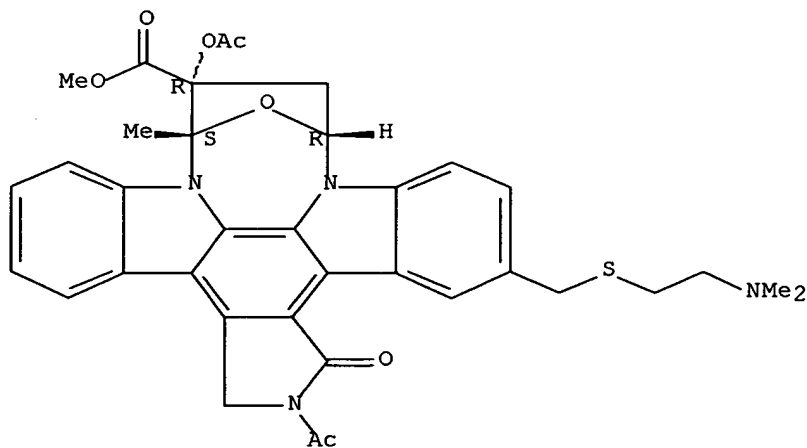
Double bond geometry unknown.



RN 167370-80-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

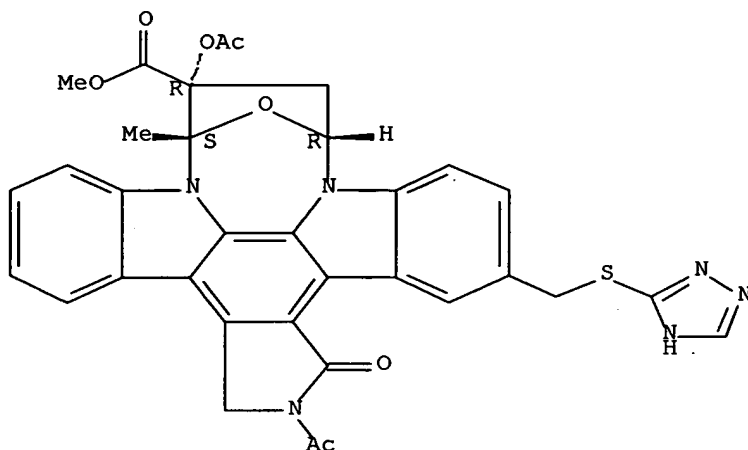
Absolute stereochemistry.



RN 167370-81-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(1H-1,2,4-triazol-3-ylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

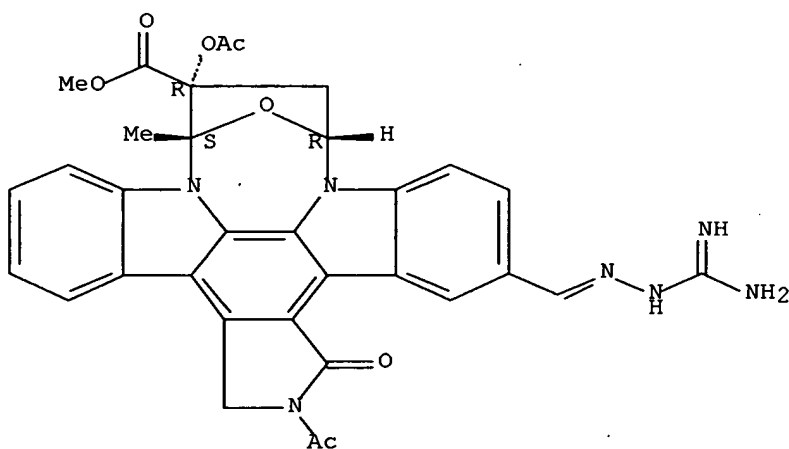


RN 167370-82-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[(aminoiminomethyl)hydrazono]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

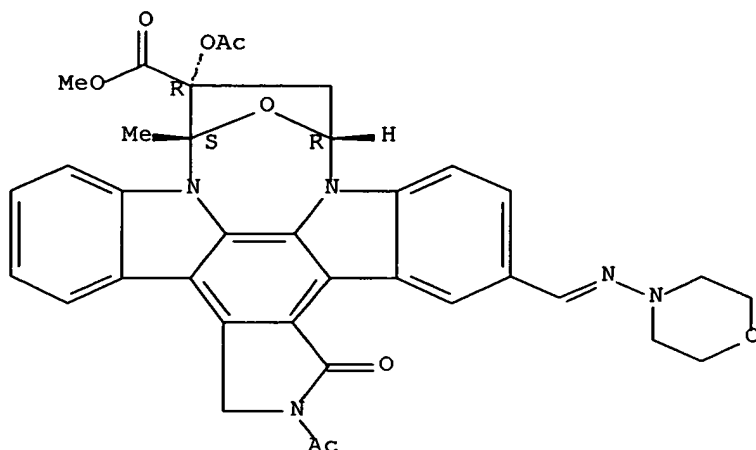


RN 167370-83-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-16-[(4-morpholinylimino)methyl]-1-oxo-methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

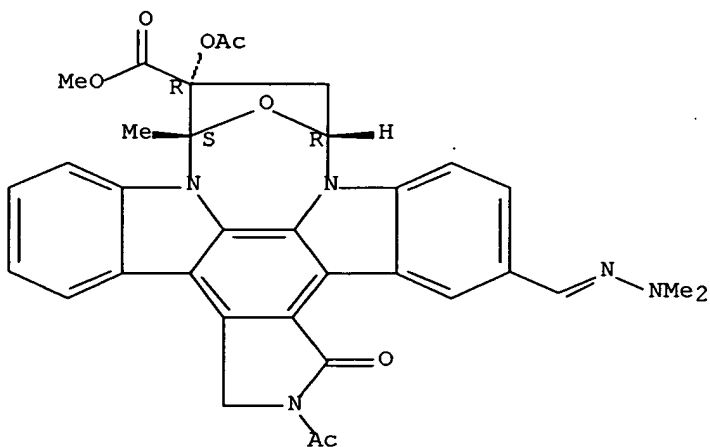


RN 167370-84-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(dimethylhydrazono)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

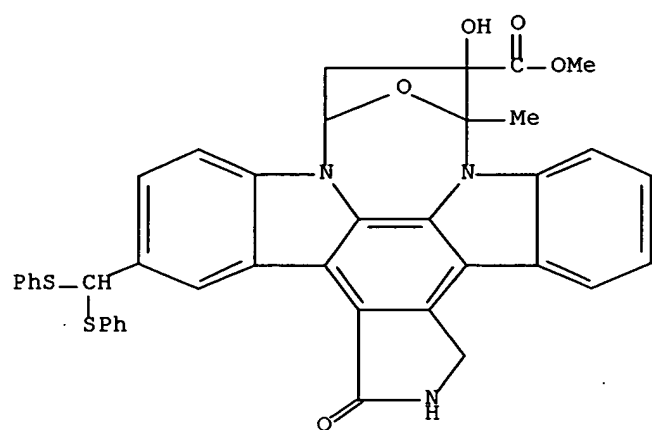
Absolute stereochemistry.

Double bond geometry unknown.



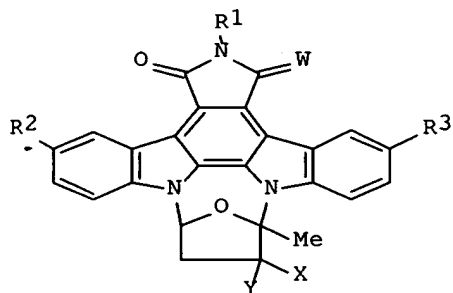
RN 167371-02-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[bis(phenylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)



L7 ANSWER 46 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1996:50820 CAPLUS
 DN 124:135699
 TI Thrombocytopenia inhibitors contg. indolocarbazole derivatives
 IN Muragata, Tsutomu; Saito, Yutaka; Shiozu, Yukimasa; Tamaoki, Tatsuya
 PA Kyowa Hakko Kogyo Kk, Japan
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|------|----------|-----------------|----------|
| PI | JP 07285870 | A2 | 19951031 | JP 1994-75543 | 19940414 |
| PRAI | JP 1994-75543 | | 19940414 | | |
| OS | MARPAT 124:135699 | | | | |
| GI | | | | | |



I

AB The inhibitors contain the title derivs. I [R1 = H, OH, (un)substituted lower alkyl, lower alkanoyl, carbamoyl; R2-3 = H, lower alkyl, NO2, OH, halo, lower alkoxy, lower alkanoyl, CH2OH, sulfo, NR4R5 (R4-5 = H, lower alkyl, carbamoyl, lower alkylaminocarbonyl, arylaminocarbonyl, lower alkanoyl), lower alkylthiomethyl, lower alkylsulfinylmethyl, OCONR6R7 (R6-7 = H, lower alkyl or NR6R7 = heterocyclyl), SO2NR6R7; W = 2H, O; X = lower alkoxy, lower alkanoyloxy, carbamoyloxy; Y = OH, lower alkoxy, lower alkanoyloxy, carbamoyloxy; X and Y may be bonded to form O, CH2O, CH2OCO2, CH2OCSO, CH2NHCSO, CH2OSO2, CH2NR11CO2 (R11 = H, lower alkyl); X = lower alkoxy, lower alkanoyl or their pharmacol. acceptable salts as active ingredients. I [R1 = R2 = R3 = H, X = CH2A [A = higher (un)satd. alkanoyloxy], Y = OH, W = 2H] are also claimed. I (R1= R3 = H, R2 = NHCOPr, W = 2H, X = CO2Me, Y = OH) showed 138% (based on control in the presence of IL-3) promotion on megakaryocyte colony formation by bone marrow cell of mouse. A freeze-dried prepn. of I.HCl (R1= R3 = H, R2 = NMe2, W = 2H, X = CO2Me, Y = OH) was also formulated.

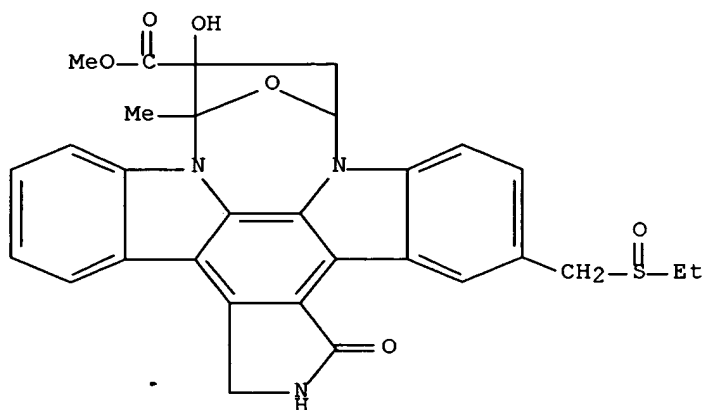
IT 173328-05-7 173328-06-8

RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological
 study, unclassified); THU (Therapeutic use); BIOL (Biological study);
 USES
 (Uses)

(thrombocytopenia inhibitors contg. indolocarbazole derivs.)

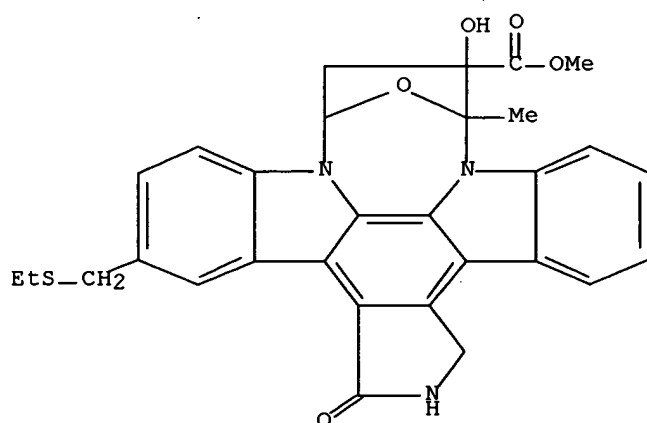
RN 173328-05-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
 i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfinyl)methyl]-
 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester (9CI)
 (CA INDEX NAME)



RN 173328-06-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
 i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-
 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester (9CI)
 (CA INDEX NAME)



L7 ANSWER 47 OF 54 CAPLUS COPYRIGHT 2003 ACS

AN 1995:958536 CAPLUS

DN 124:202711

TI Preparation of staurosporine derivatives as protein kinase inhibitors
for

the treatment of neurological disorders

IN Lewis, Michael E.; Kauer, James C.; Neff, Nicola; Roberts-Lewis, Jill;
Murakata, Chikara; Saito, Hiromitsu; Matsuda, Yuzuru; Glicksman, Marcie

A.

PA Cephalon, Inc., USA; Kyowa Hakko Kogyo Co., Ltd.

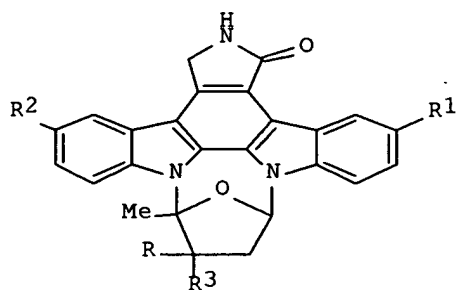
SO U.S., 35 pp. Cont.-in-part of U.S. Ser. No. 920,102, abandoned.
CODEN: USXXAM

DT Patent

LA English

FAN.CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | US 5461146 | A | 19951024 | US 1993-96561 | 19930722 |
| | HU 71239 | A2 | 19951128 | HU 1995-192 | 19930726 |
| | EP 768312 | A2 | 19970416 | EP 1996-116661 | 19930726 |
| | EP 768312 | A3 | 19970604 | | |
| | EP 768312 | B1 | 20000906 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| | AT 152111 | E | 19970515 | AT 1993-917337 | 19930726 |
| | ES 2101331 | T3 | 19970701 | ES 1993-917337 | 19930726 |
| | EP 1002534 | A1 | 20000524 | EP 1999-120008 | 19930726 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE | | | | |
| | AT 196142 | E | 20000915 | AT 1996-116661 | 19930726 |
| | ES 2151629 | T3 | 20010101 | ES 1996-116661 | 19930726 |
| | NZ 286198 | A | 20010629 | NZ 1993-286198 | 19930726 |
| | JP 2003113184 | A2 | 20030418 | JP 2002-244111 | 19930726 |
| | US 5621100 | A | 19970415 | US 1994-329540 | 19941026 |
| | US 5756494 | A | 19980526 | US 1995-456642 | 19950602 |
| | US 5621101 | A | 19970415 | US 1995-486739 | 19950607 |
| | US 5741808 | A | 19980421 | US 1997-800383 | 19970214 |
| PRAI | US 1992-920102 | B2 | 19920724 | | |
| | US 1993-96561 | A2 | 19930722 | | |
| | EP 1993-917337 | A3 | 19930726 | | |
| | EP 1996-116661 | A3 | 19930726 | | |
| | JP 1994-504731 | A3 | 19930726 | | |
| | US 1994-329540 | A2 | 19941026 | | |
| | US 1995-456642 | A3 | 19950602 | | |
| OS | MARPAT 124:202711 | | | | |
| GI | | | | | |



I

AB The K-252a, and bis-N-substituted derivs. of staurosporine I (R = HO, MeO;
 as R1, R2 = H, Br; R3 = CH2OH, CH2NHCO2Ph, CONHPh, CH2NHCO2Me) were prepd.

protein kinase inhibitors for treatment of diseased neuronal cells.
 Thus,

N-phenylcarbamylstaurosporine was reduced with NaBH4 followed by
 treatment
 with carbobenzyloxy-L-serine and hydrogenolysis to give I (R, R1, R2 =
 H,
 R3 = CH2NH-Ser). I promoted survival of striatal neurons in the
 striatal
 cell survival assay.

IT 118735-80-1 121664-89-9 121665-11-0
 156177-73-0 156177-75-2 156177-79-6
 167371-04-2 167371-05-3 167371-06-4
 167371-07-5 167371-08-6

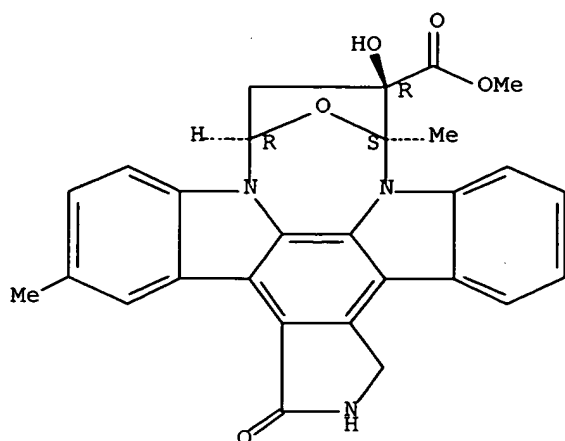
RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological
 study, unclassified); BIOL (Biological study)
 (prepn. of staurosporine derivs. as protein kinase inhibitors for
 treatment of neurol. disorders)

RN 118735-80-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
 i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-
 hydroxy-9,16-dimethyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA

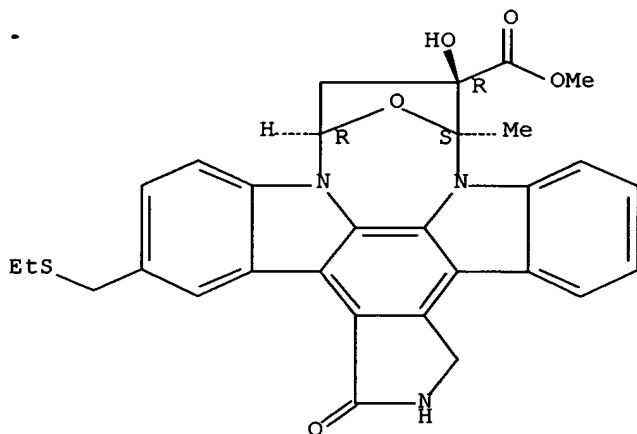
INDEX
 NAME)

Absolute stereochemistry.



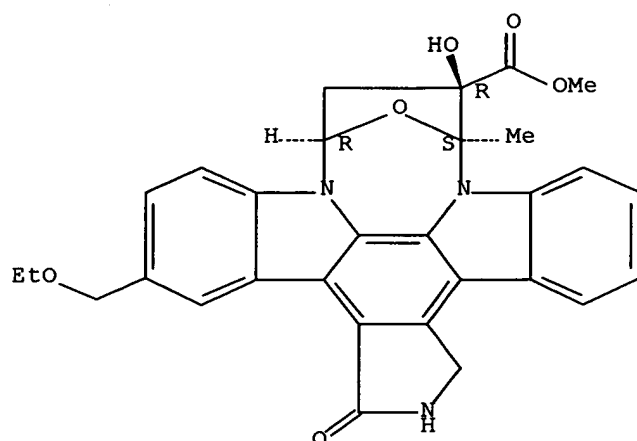
RN 121664-89-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



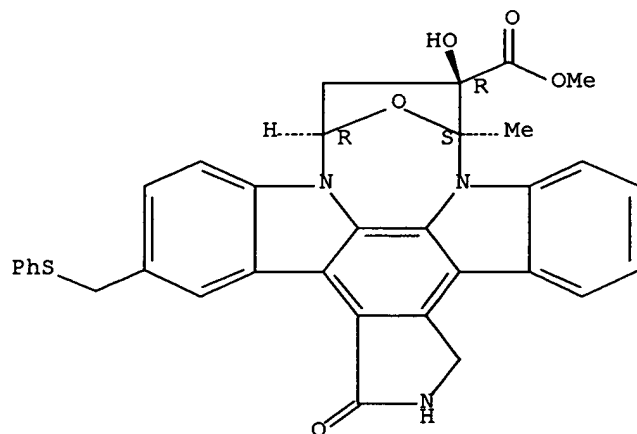
RN 121665-11-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



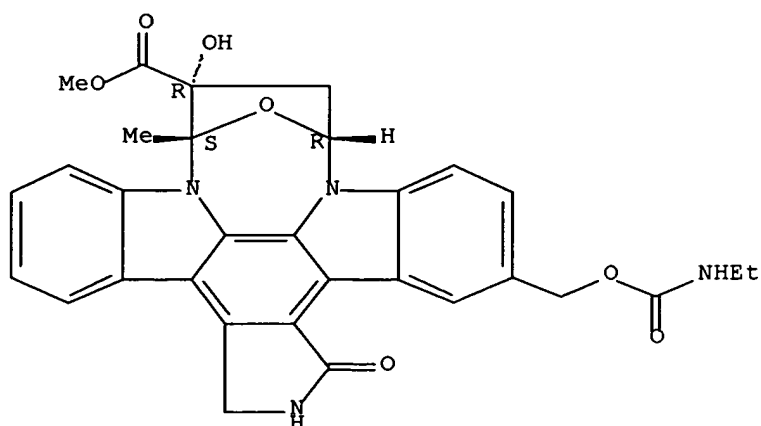
RN 156177-73-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(phenylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 156177-75-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[(ethylamino)carbonyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

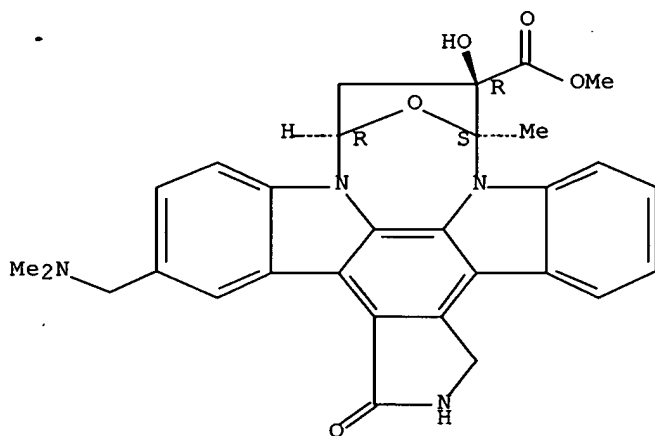
Absolute stereochemistry.



RN 156177-79-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(dimethylamino)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

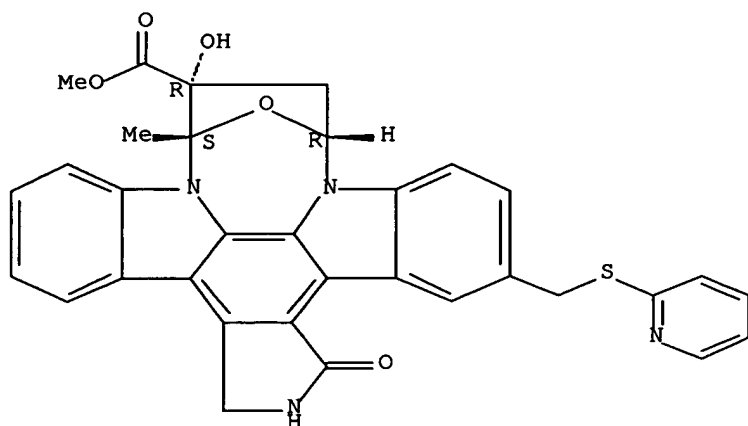
Absolute stereochemistry.



RN 167371-04-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyridinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

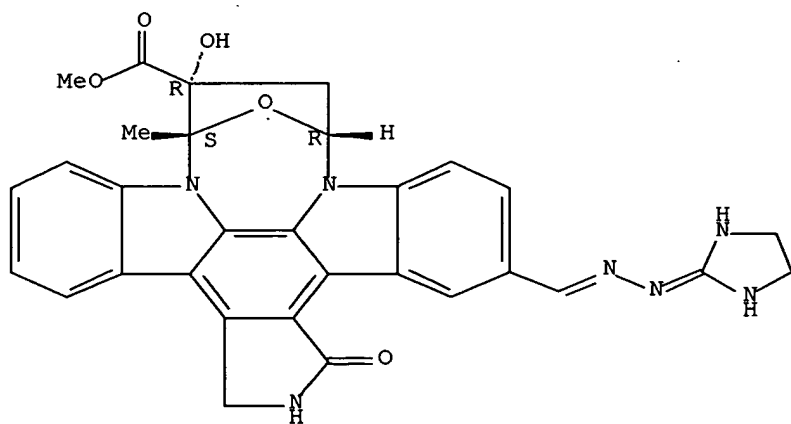


RN 167371-05-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(4,5-dihydro-1H-imidazol-2-yl)hydrazono]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

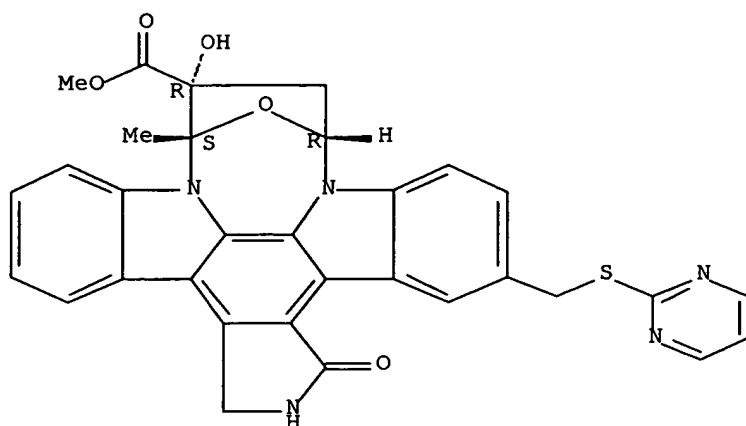
Double bond geometry unknown.



RN 167371-06-4 CAPLUS

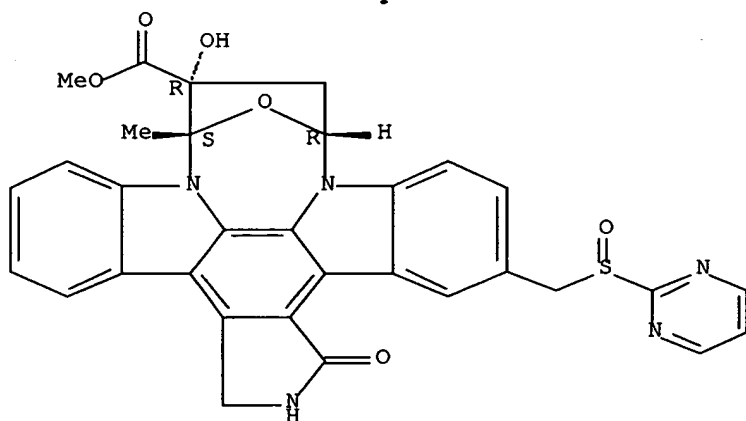
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyrimidinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



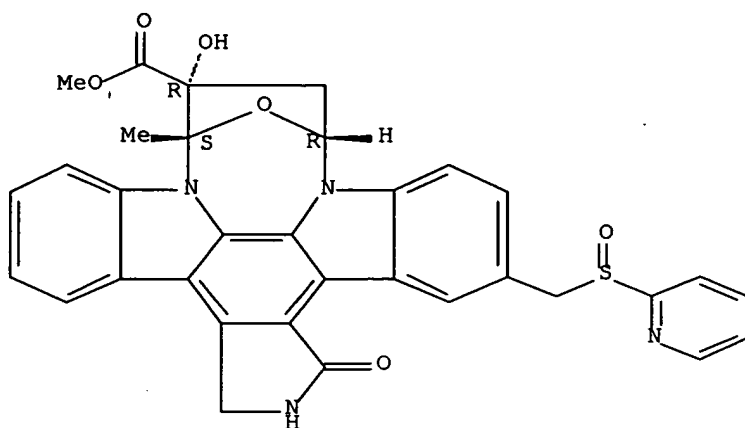
RN 167371-07-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyrimidinylsulfinyl)methyl]-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 167371-08-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyridinylsulfinyl)methyl]-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 156177-61-6

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological

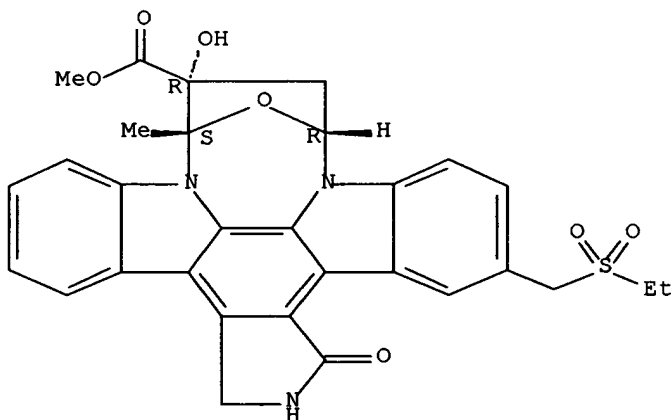
study, unclassified); RCT (Reactant); BIOL (Biological study); RACT
(Reactant or reagent)

(prepn. of staurosporine derivs. as protein kinase inhibitors for
treatment of neurol. disorders)

RN 156177-61-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfonyl)methyl]-
2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
(9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 156177-65-0P 156177-66-1P

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological

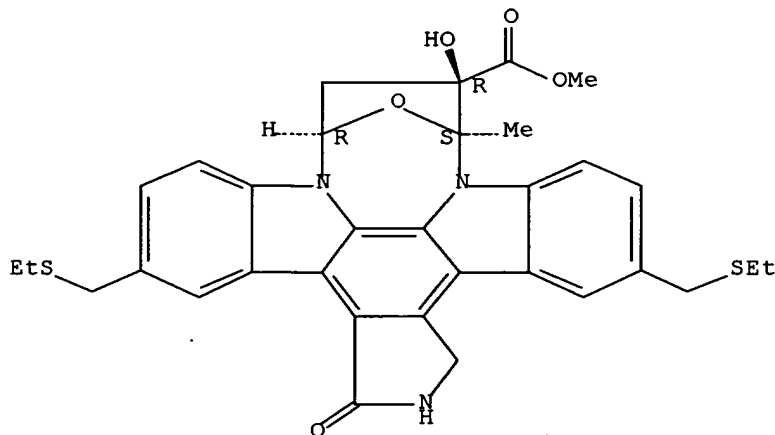
study, unclassified); SPN (Synthetic preparation); BIOL (Biological
study); PREP (Preparation)

(prepn. of staurosporine derivs. as protein kinase inhibitors for
treatment of neurol. disorders)

RN 156177-65-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

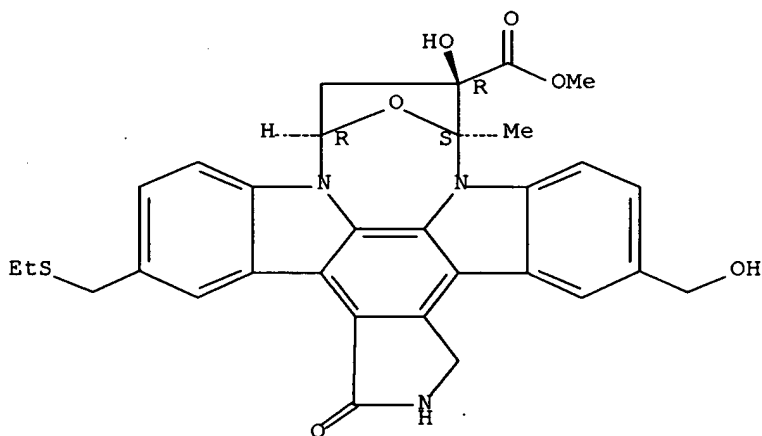
Absolute stereochemistry.



RN 156177-66-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 121664-78-6 121664-90-2

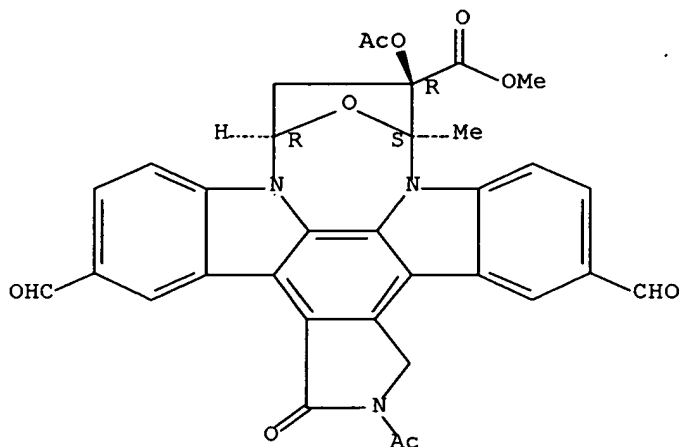
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of staurosporine derivs. as protein kinase inhibitors for treatment of neurol. disorders)

RN 121664-78-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-diformyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester,

(9S,10R,12R)- (9CI) (CA INDEX NAME)

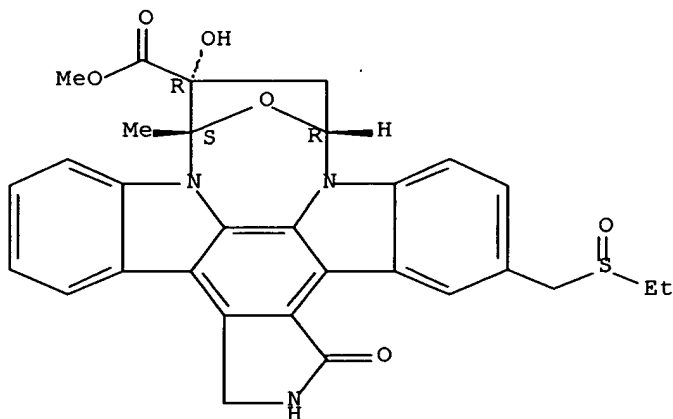
Absolute stereochemistry.



RN 121664-90-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfinyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 156177-91-2P 156177-93-4P 173829-96-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

(Reactant or reagent)

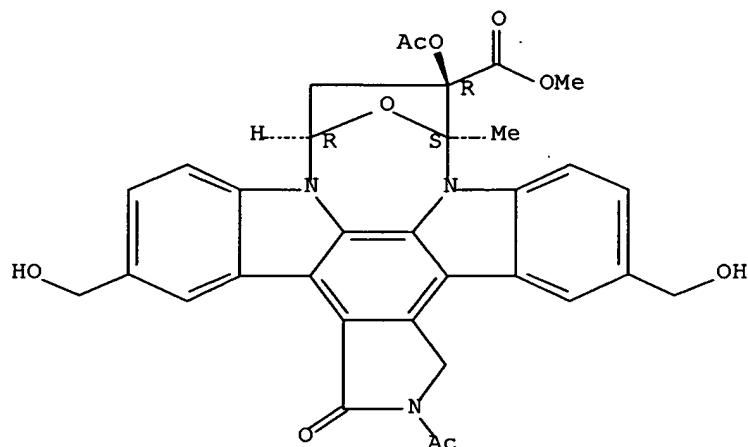
(prepn. of staurosporine derivs. as protein kinase inhibitors for treatment of neurol. disorders)

RN 156177-91-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl

ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

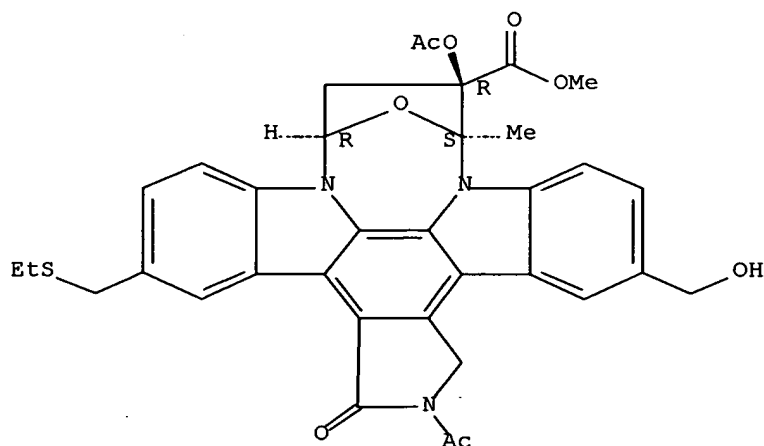


RN 156177-93-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-5-(hydroxymethyl)-9-methyl-

1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

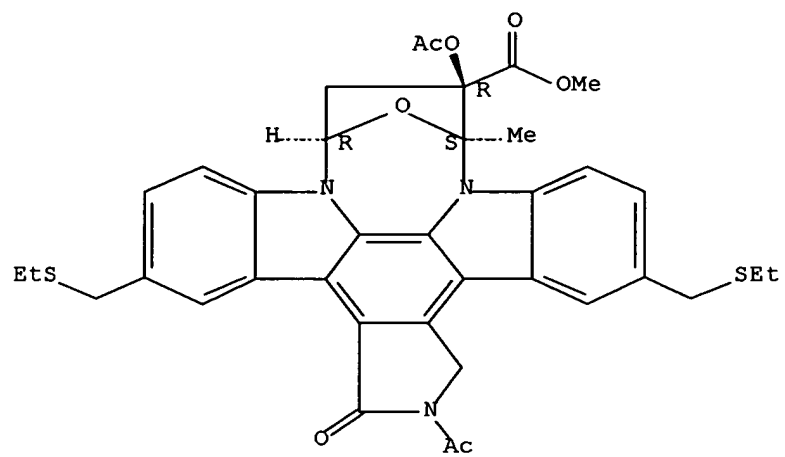
Absolute stereochemistry.



RN 173829-96-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

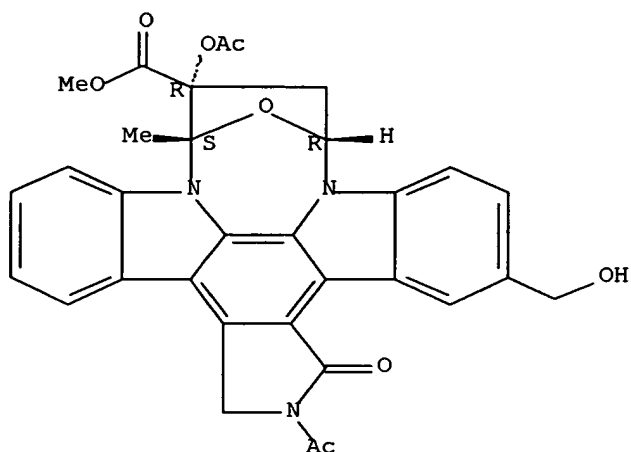
Absolute stereochemistry.



L7 ANSWER 48 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1995:931389 CAPLUS
 DN 124:15478
 TI Aqueous indolocarbazole solutions
 IN Goldstein, Joel D.; Herman, Joseph L.
 PA Cephalon, Inc., USA
 SO PCT Int. Appl., 89 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9522331 | A1 | 19950824 | WO 1995-US1436 | 19950203 |
| | W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LV, MG, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SI, SK, TJ, TT, UA, UZ, VN RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | AU 9519110 | A1 | 19950904 | AU 1995-19110 | 19950203 |
| PRAI | US 1994-199390 | | 19940218 | | |
| | WO 1995-US1436 | | 19950203 | | |
| OS | MARPAT 124:15478 | | | | |
| AB | Indolocarbazole solns. are disclosed. The invention features a soln. comprising: (i) an indolocarbazole; (ii) a selected org. solvent being present in a concn. of between about 1% and about 99% by wt. inclusive, (iii) a dispersant being present in a concn. of between about 0.25% and about 10% by wt. inclusive; (i.v.) water being present in a concn. of between 0% and about 99% by wt. inclusive, and (v) a polyethylene glycol being present in a concn. of between 0% and about 60% by wt. inclusive. | | | | |
| IT | 118777-60-9 121664-78-6 170719-62-7 RL: RCT (Reactant); RACT (Reactant or reagent) (aq. indolocarbazole pharmaceutical solns.) | | | | |
| RN | 118777-60-9 CAPLUS | | | | |
| CN | 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4- i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)- 2,3,9,10,11,12-hexahydro-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME) | | | | |

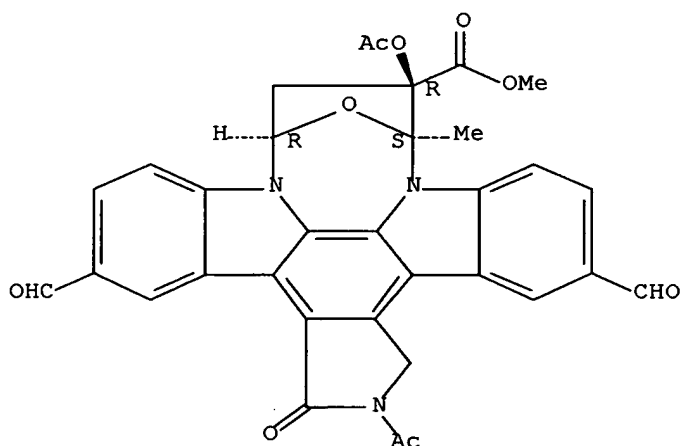
Absolute stereochemistry.



RN 121664-78-6 CAPLUS

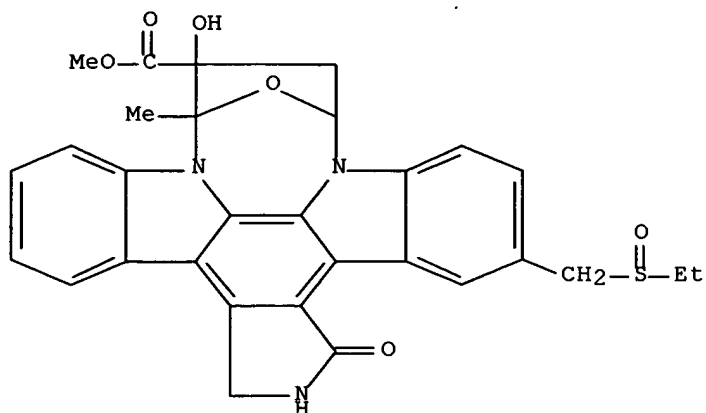
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-diformyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 170719-62-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfinyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9.alpha.,10.alpha.,12.alpha.)- (9CI) (CA INDEX NAME)



IT 156177-91-2P 156177-92-3P 156177-93-4P
167370-72-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

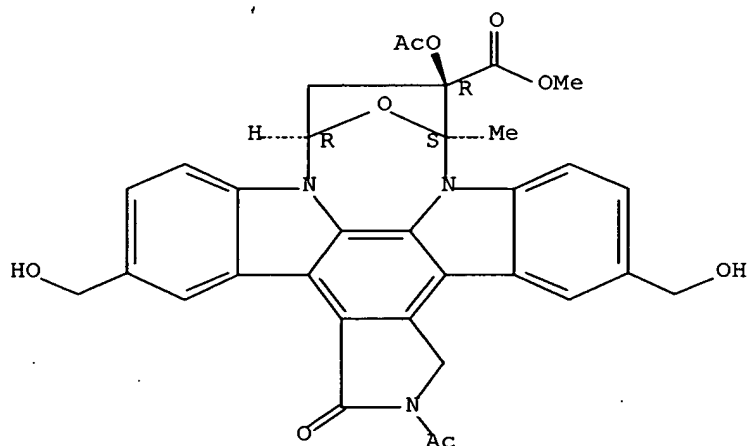
(Reactant or reagent)

(aq. indolocarbazole pharmaceutical solns.)

RN 156177-91-2 CAPLUS

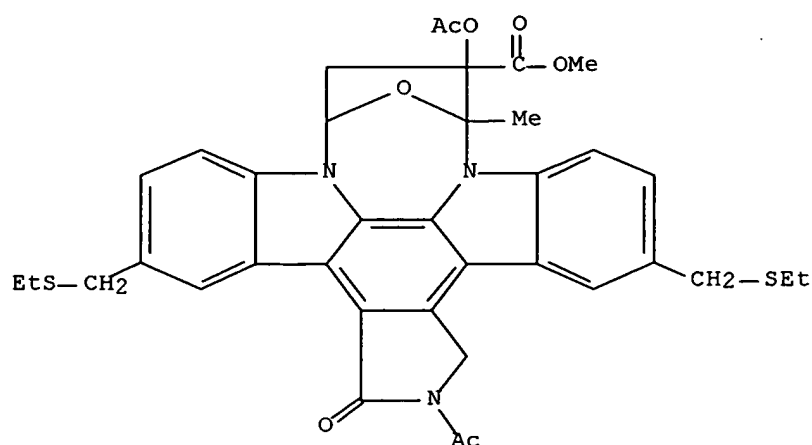
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



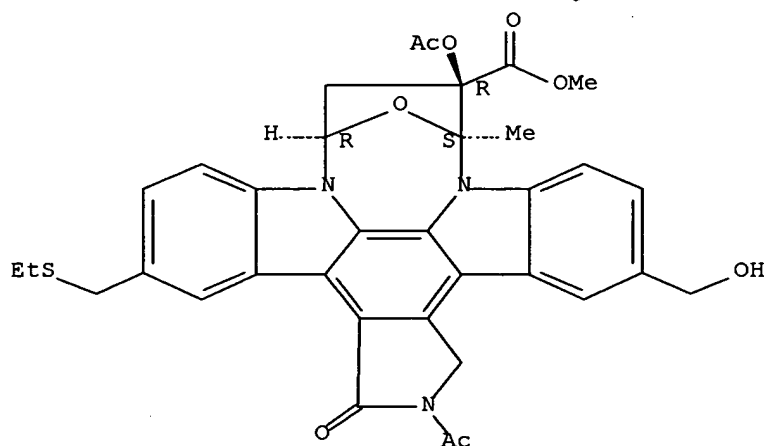
RN 156177-92-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9.alpha.,10.beta.,12.alpha.)- (9CI) (CA INDEX NAME)



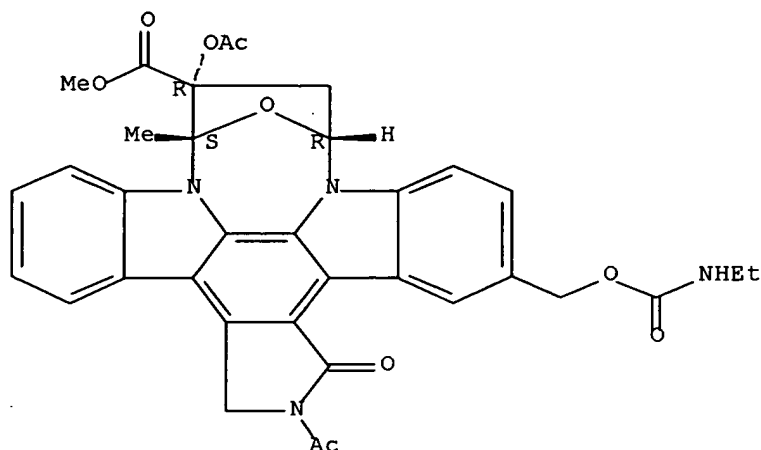
RN 156177-93-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 167370-72-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[[(ethylamino)carbonyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



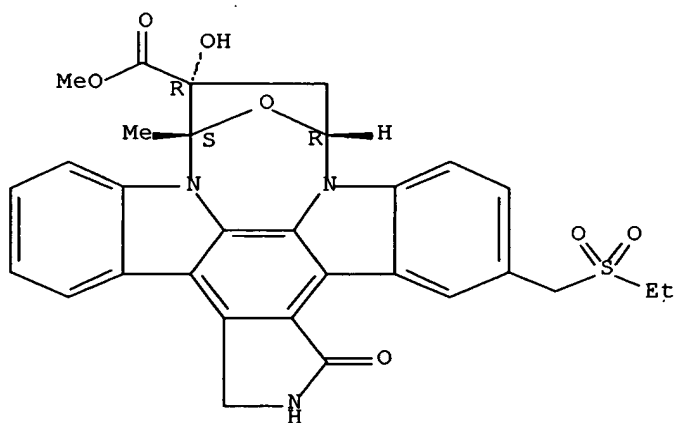
IT 156177-61-6P 156177-65-0P 156177-66-1P
156177-75-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(aq. indolocarbazole pharmaceutical solns.)

RN 156177-61-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfonyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

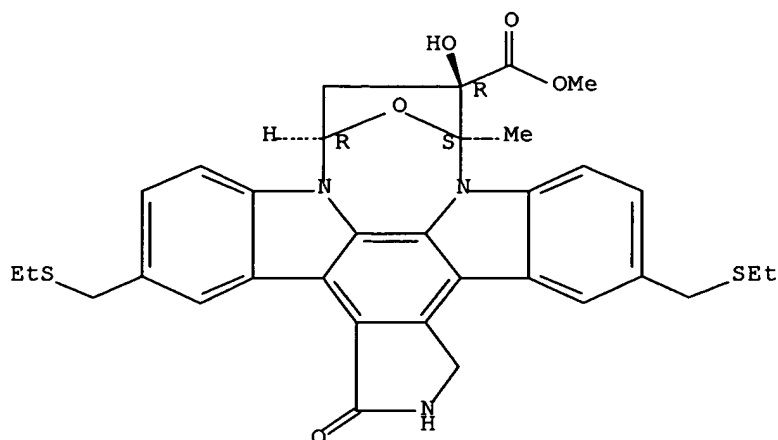
Absolute stereochemistry.



RN 156177-65-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

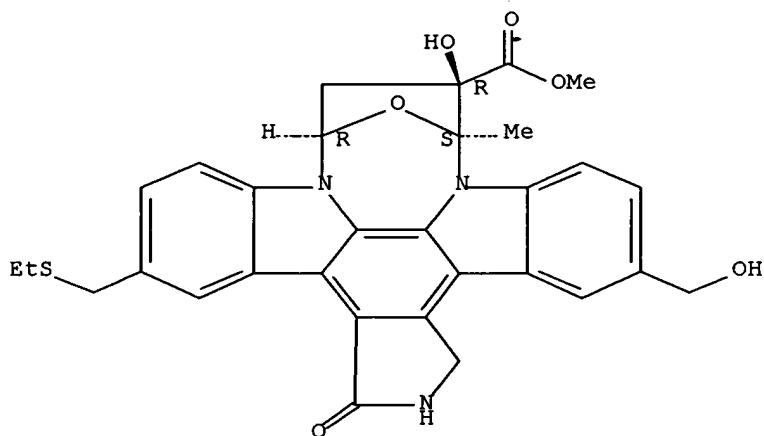
Absolute stereochemistry.



RN 156177-66-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

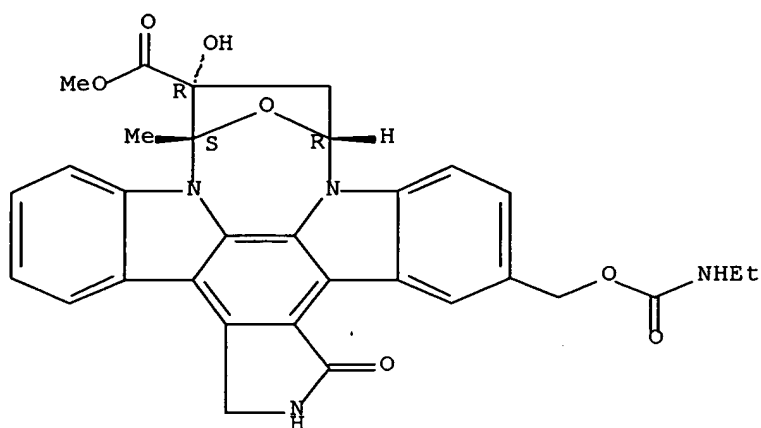
Absolute stereochemistry.



RN 156177-75-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[(ethylamino)carbonyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



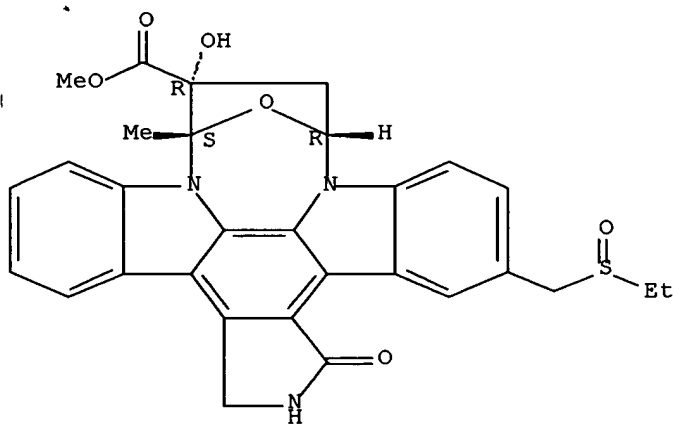
IT 121664-90-2

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aq. indolocarbazole pharmaceutical solns.)

RN 121664-90-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfinyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. .



L7 ANSWER 49 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1995:777654 CAPLUS
 DN 123:198839
 TI Preparation of indolocarbazole derivatives to treat prostatic cancer and hypertrophy
 IN Dionne, Craig A.; Contreras, Patricia C.; Murakata, Chikara
 PA Cephalon, Inc., USA; Kyowa Hakko Kogyo Co., Ltd.
 SO PCT Int. Appl., 95 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9427982 | A1 | 19941208 | WO 1994-US6082 | 19940527 |
| | W: AU, CA, FI, HU, JP, KR, LK, NO, NZ, PL, RO, RU, UA | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | CA 2163904 | AA | 19941208 | CA 1994-2163904 | 19940527 |
| | AU 9469607 | A1 | 19941220 | AU 1994-69607 | 19940527 |
| | AU 679752 | B2 | 19970710 | | |
| | EP 699204 | A1 | 19960306 | EP 1994-918168 | 19940527 |
| | EP 699204 | B1 | 19980415 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| | EP 839814 | A2 | 19980506 | EP 1998-200023 | 19940527 |
| | EP 839814 | A3 | 19980916 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE | | | | |
| | AT 165097 | E | 19980515 | AT 1994-918168 | 19940527 |
| | ES 2118414 | T3 | 19980916 | ES 1994-918168 | 19940527 |
| | JP 2002504064 | T2 | 20020205 | JP 1995-501026 | 19940527 |
| | JP 3344586 | B2 | 20021111 | | |
| | JP 2002356487 | A2 | 20021213 | JP 2002-153049 | 19940527 |
| | FI 9505709 | A | 19960103 | FI 1995-5709 | 19951127 |
| | NO 9504816 | A | 19960126 | NO 1995-4816 | 19951127 |
| PRAI | US 1993-69178 | A | 19930528 | | |
| | US 1993-96622 | A | 19930722 | | |
| | EP 1994-918168 | A3 | 19940527 | | |
| | JP 1995-501026 | A3 | 19940527 | | |
| | WO 1994-US6082 | W | 19940527 | | |
| OS | MARPAT 123:198839 | | | | |
| GI | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; R = OH, alkoxy, acyloxy; R1, R2, R5, R6 = H, Cl, F, Br, I, NO2, CN, substituted ureido, etc.; X = H, CONHPh, etc.; Z1, Z2 = H, O (when combined)] [II; R1, R2, R5, R6 = H, halogen, NO2, CN, OH, substituted ureido; R3, R4 = H, alkyl, hydroxyalkyl, alkenyl; Z1, Z2 = H, O (when combined)], useful as inhibitors of tyrosine kinase activity assocd. with neurotrophin receptors for treating benign prostatic hypertrophy or prostate cancer, are prepd. Thus, oxadiazepine I (R = OH,

R1 = R2 = R5 = R6 = Z1 = Z2 = H, X = CONHCH2CH2OH) was prepd. and demonstrated a IC50 of 0.038 .mu.M against the Tsu-Pr1 human prostate cancer cell line.

IT 118735-80-1 121664-89-9 121664-90-2
 121665-11-0 167370-94-7 167371-02-0
 167371-04-2 167371-05-3 167371-06-4
 167371-07-5 167371-08-6 167371-09-7
 167371-10-0 167371-11-1 167371-12-2
 167371-13-3 167371-14-4 167371-15-5
 167371-16-6 167371-17-7 167371-18-8

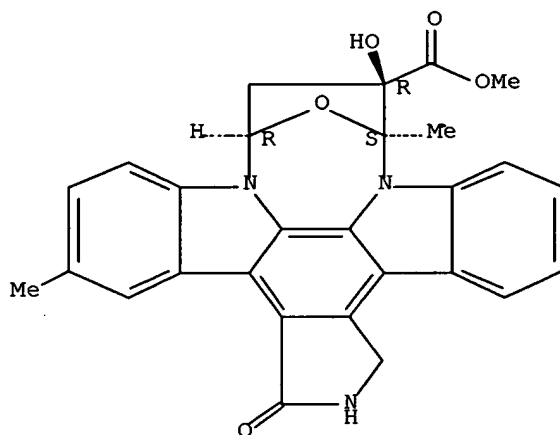
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (claimed compd.; prepn. of indolocarbazole derivs. to treat prostatic cancer and benign prostatic hypertrophy)

RN 118735-80-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9,16-dimethyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA

INDEX
 NAME)

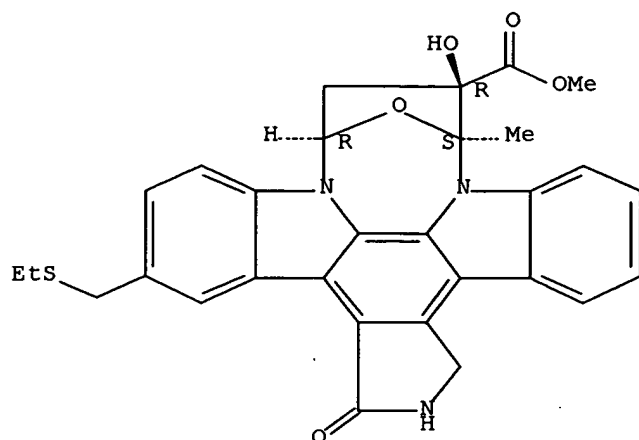
Absolute stereochemistry.



RN 121664-89-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

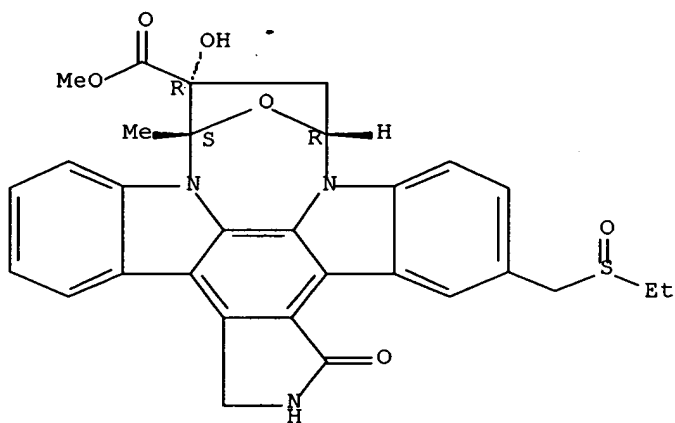
Absolute stereochemistry.



RN 121664-90-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfinyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

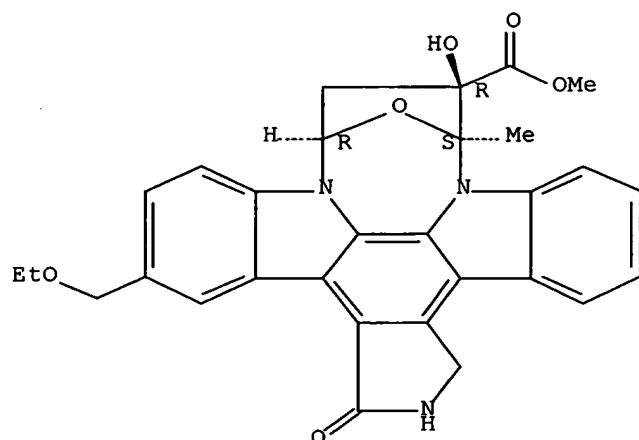
Absolute stereochemistry.



RN 121665-11-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

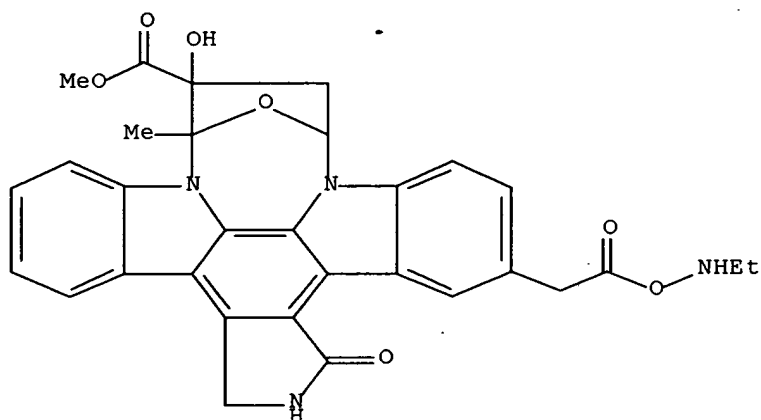
Absolute stereochemistry.



RN 167370-94-7 CAPLUS

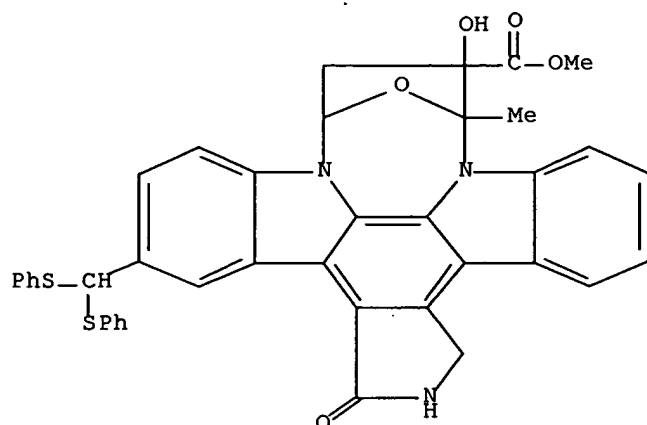
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[2-[(ethylamino)oxy]-2-oxoethyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9.alpha.,10.beta.,12.alpha.)- (9CI) (CA INDEX NAME)

Currently available stereo shown.



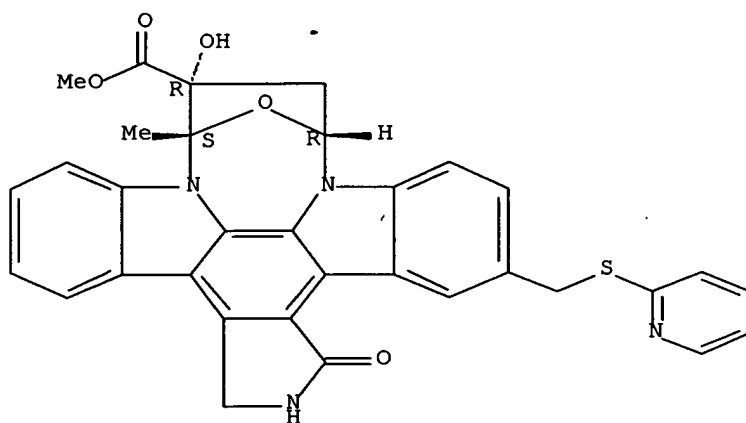
RN 167371-02-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[bis(phenylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)



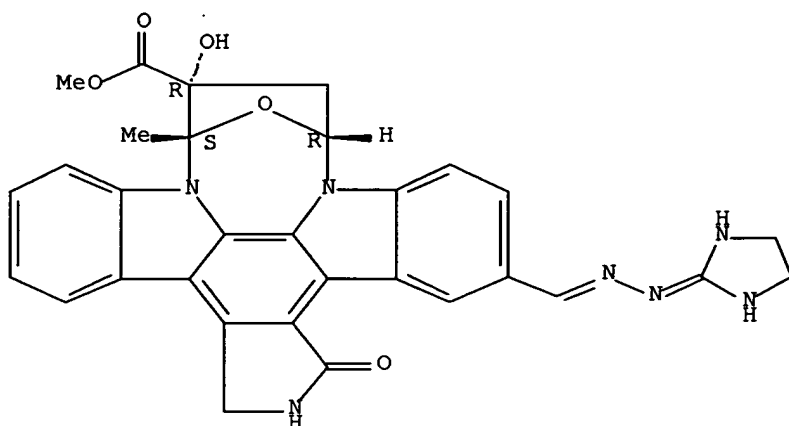
RN 167371-04-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyridinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 167371-05-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[4,5-dihydro-1H-imidazol-2-yl)hydrazone]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

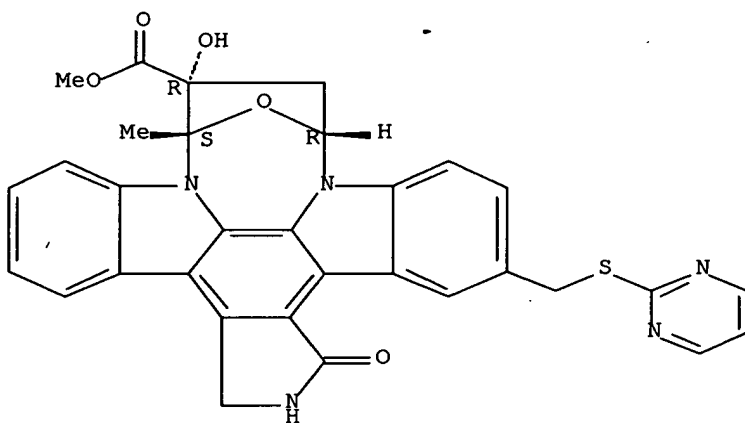
Absolute stereochemistry.
 Double bond geometry unknown.



RN 167371-06-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyrimidinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

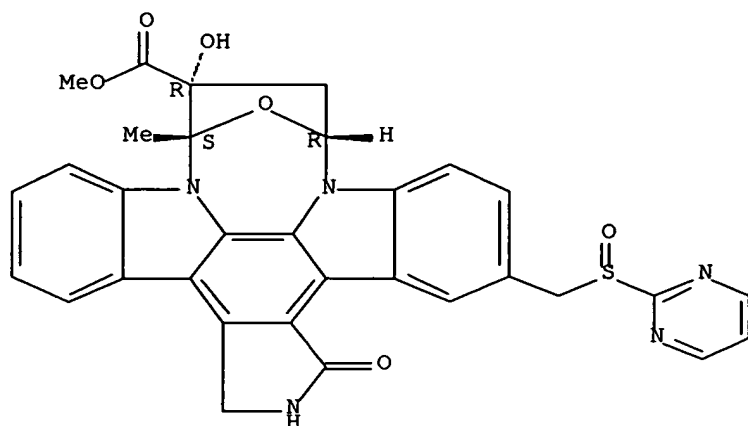
Absolute stereochemistry.



RN 167371-07-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyrimidinylsulfinyl)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

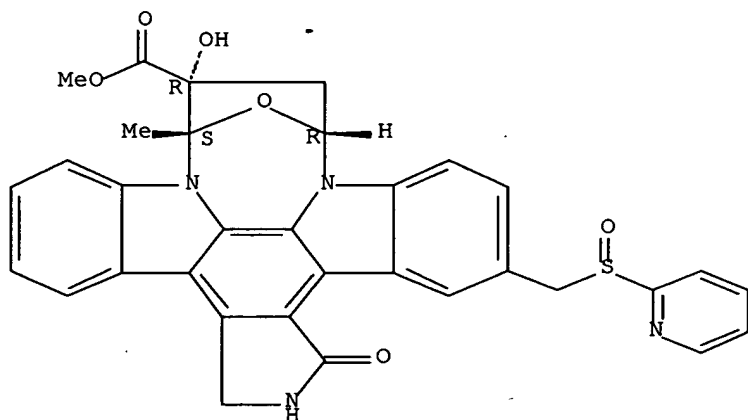
Absolute stereochemistry.



RN 167371-08-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyridinylsulfinyl)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

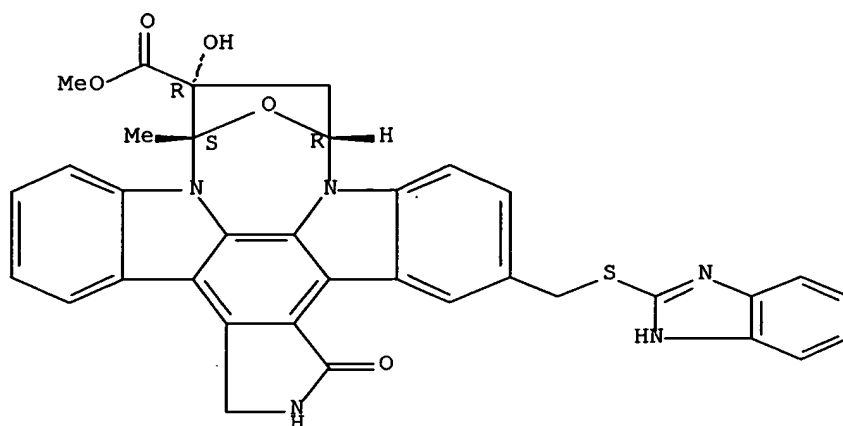
Absolute stereochemistry.



RN 167371-09-7 CAPLUS

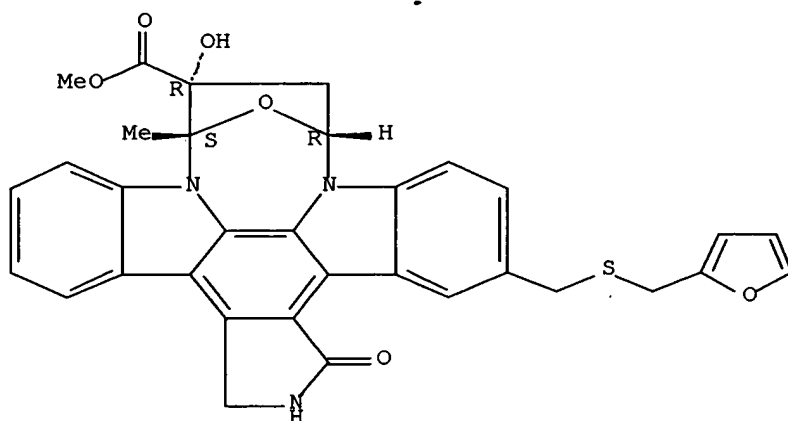
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(1H-benzimidazol-2-ylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



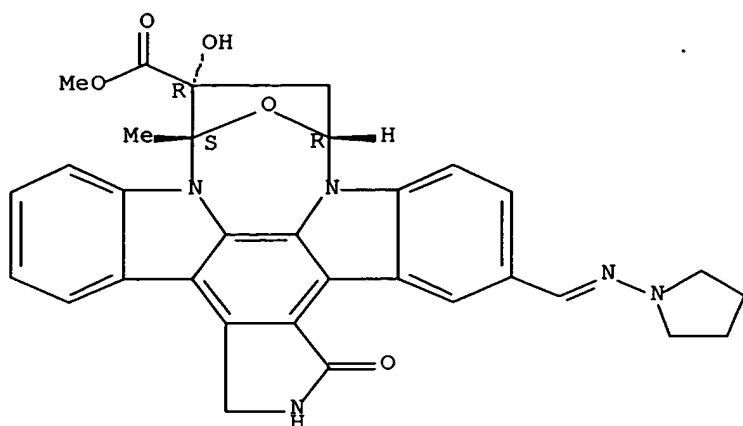
RN 167371-10-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(2-furanylmethyl)thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 167371-11-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1-pyrrolidinylimino)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.

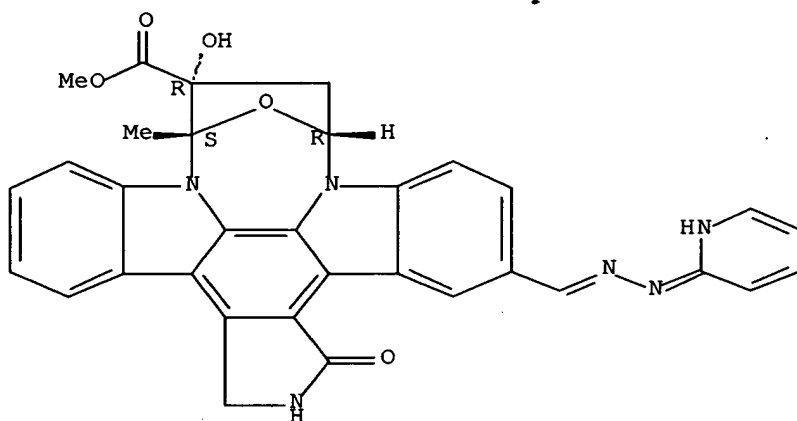


RN 167371-12-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(2-pyridinylhydrazono)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

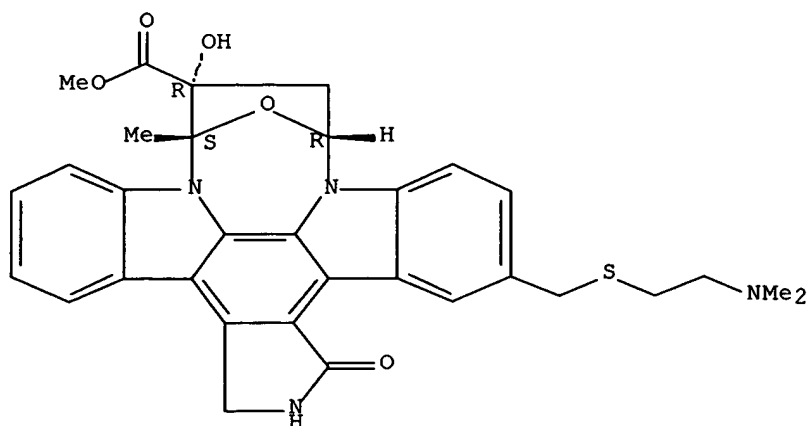
Double bond geometry unknown.



RN 167371-13-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

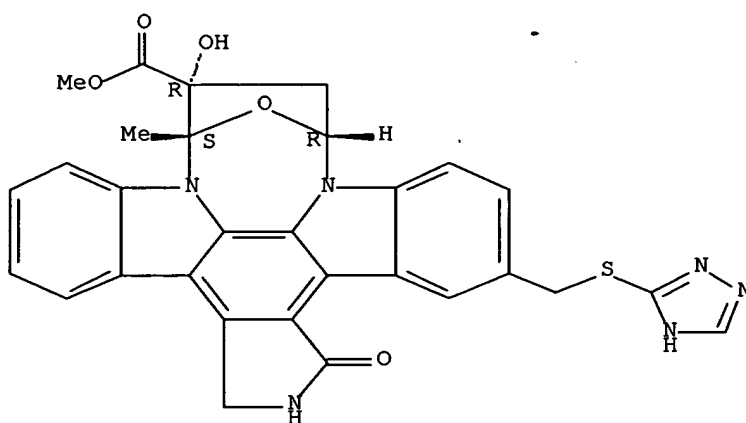
Absolute stereochemistry.



RN 167371-14-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1H-1,2,4-triazol-3-ylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

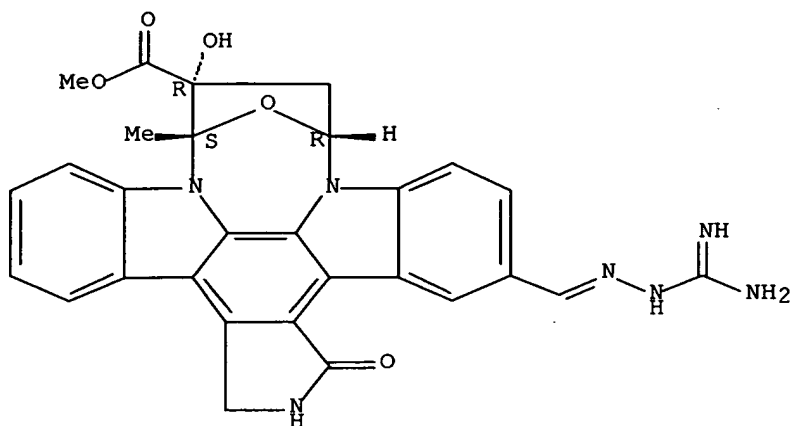


RN 167371-15-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[(aminoiminomethyl)hydrazono]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

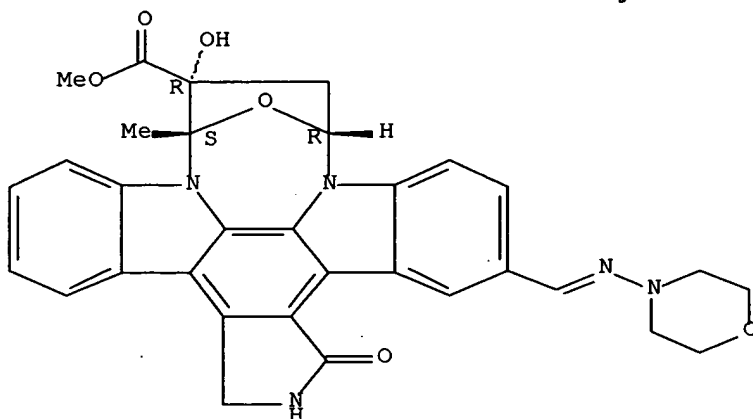


RN 167371-16-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-16-[(4-morpholinylimino)methyl]-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

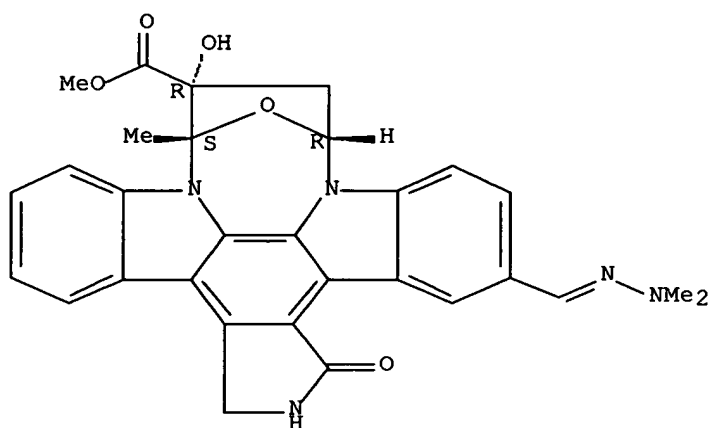


RN 167371-17-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(dimethylhydrazono)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

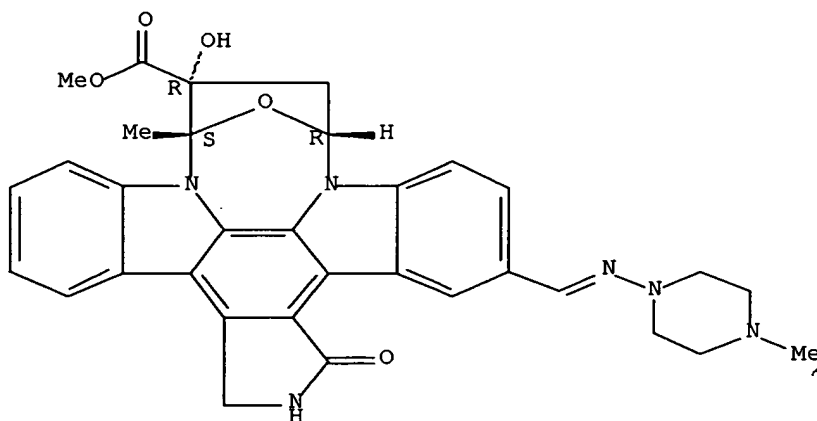
Absolute stereochemistry.

Double bond geometry unknown.



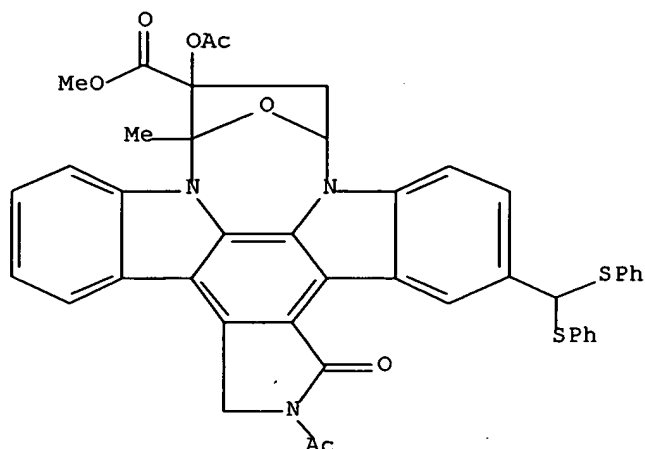
RN 167371-18-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-16-[[(4-methyl-1-piperazinyl)imino]methyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.



IT 167370-75-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
 RACT (Reactant or reagent)
 (claimed compd.; prepn. of indolocarbazole derivs. to treat prostatic cancer and benign prostatic hypertrophy from)
 RN 167370-75-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-bis(phenylthio)methyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9.alpha.,10.beta.,12.alpha.)- (9CI) (CA INDEX NAME)

Currently available stereo shown.



IT 118777-59-6 118777-60-9 156177-65-0

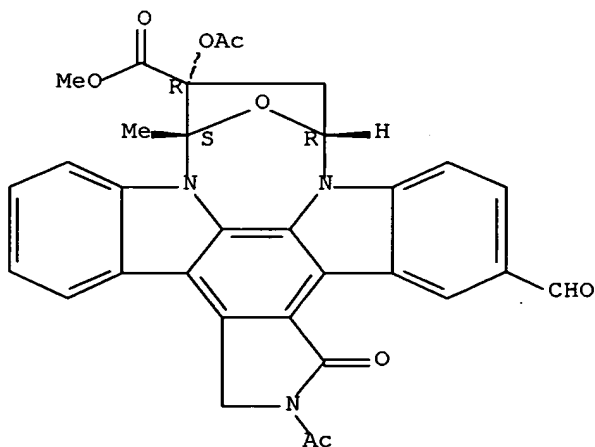
RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of indolocarbazole derivs. to treat prostatic cancer and benign prostatic hypertrophy from)

RN 118777-59-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

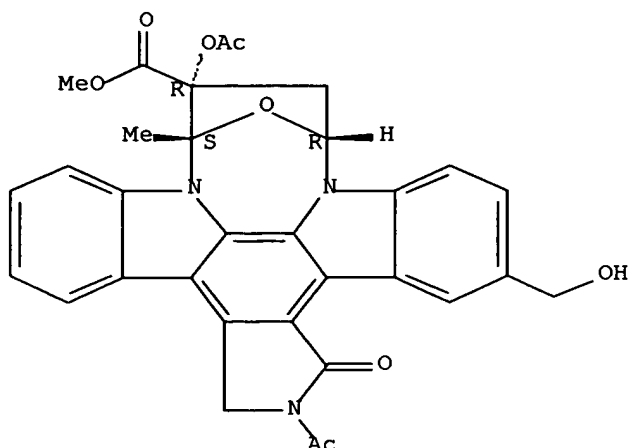
Absolute stereochemistry.



RN 118777-60-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

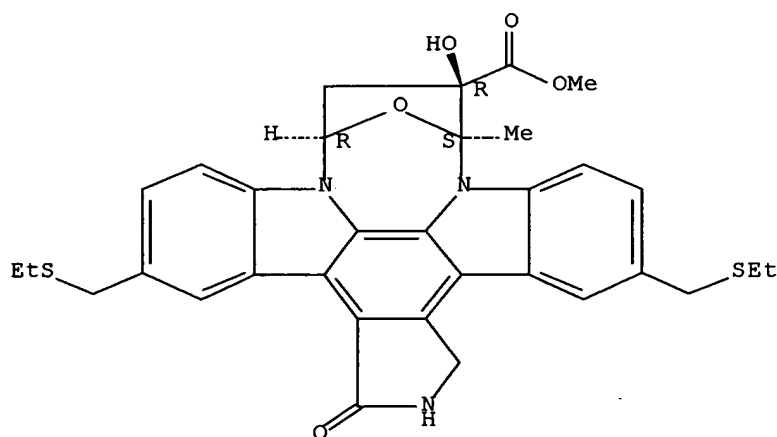
Absolute stereochemistry.



RN 156177-65-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 167370-72-1P 167370-76-5P 167370-77-6P
167370-78-7P 167370-79-8P 167370-80-1P
167370-81-2P 167370-82-3P 167370-83-4P
167370-84-5P 167370-85-6P 167370-88-9P
167370-89-0P 167370-90-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

(Reactant or reagent)

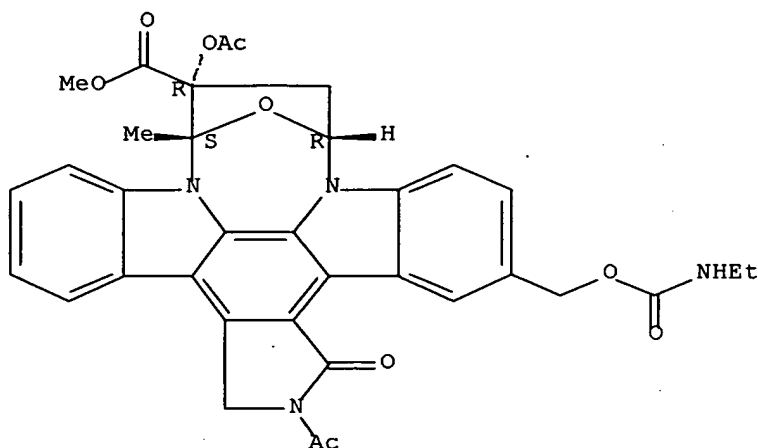
(prepn. of indolocarbazole derivs. to treat prostatic cancer and benign

prostatic hypertrophy from)

RN 167370-72-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[[(ethylamino)carbonyl]oxy)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.beta.,12.alpha.)]- (9CI) (CA INDEX NAME)

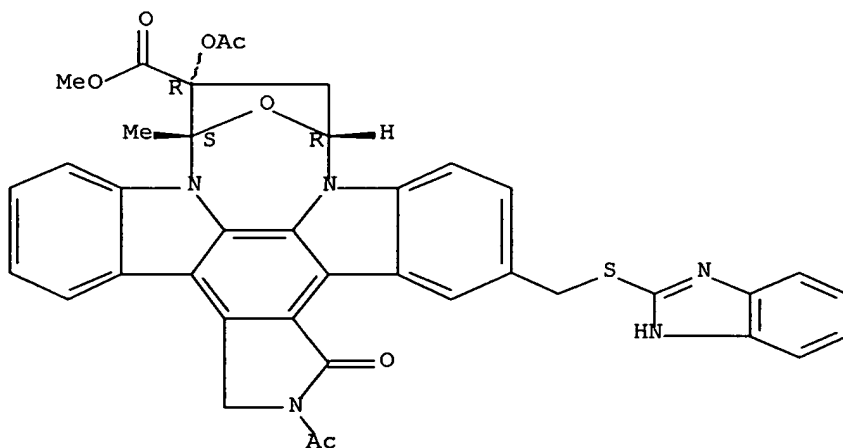
Absolute stereochemistry.



RN 167370-76-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[(1H-benzimidazol-2-ylthio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

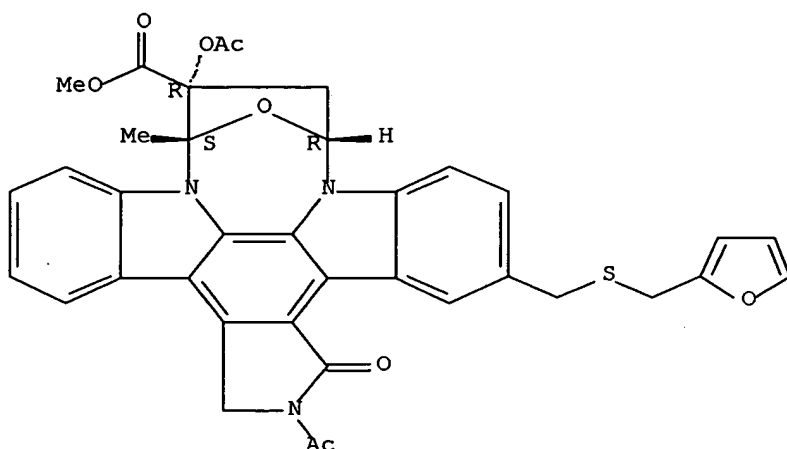


RN 167370-77-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[(2-

furanylmethyl)thio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-,
methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

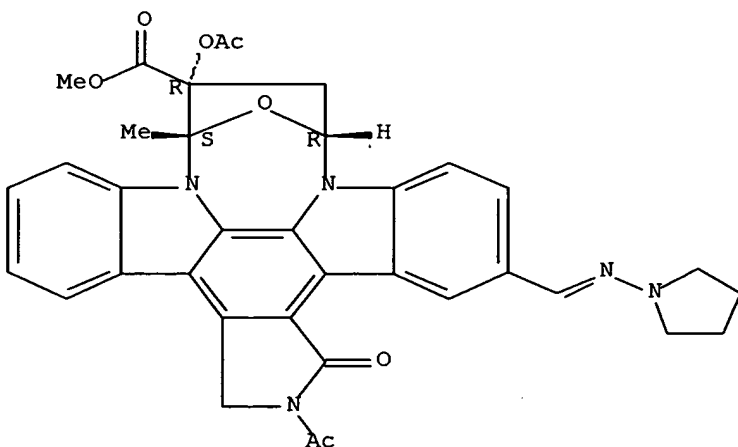


RN 167370-78-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(1-pyrrolidinylimino)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

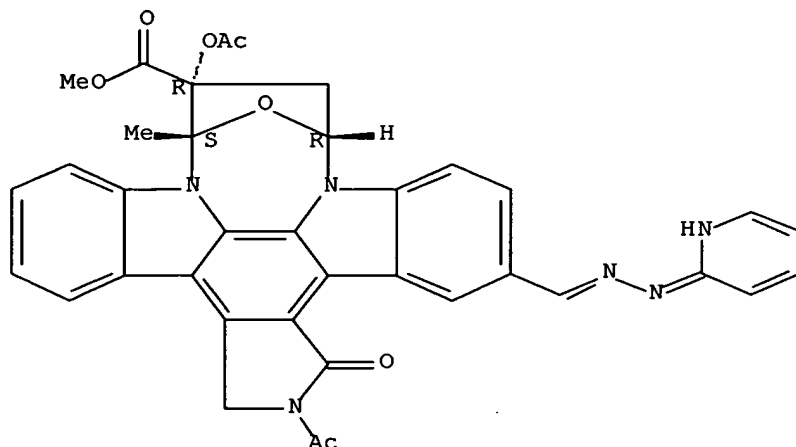
Double bond geometry unknown.



RN 167370-79-8 CAPLUS

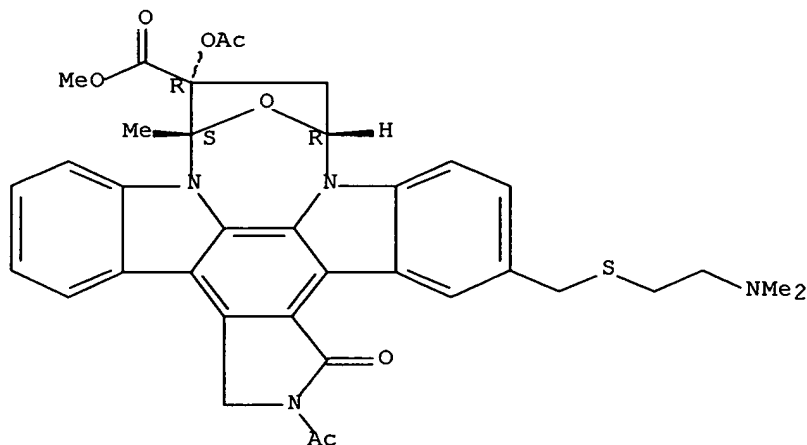
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(2-pyridinylhydrazone)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



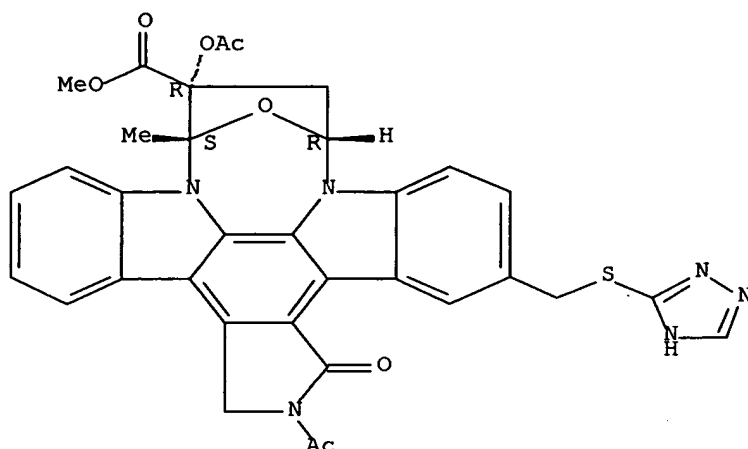
RN 167370-80-1 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



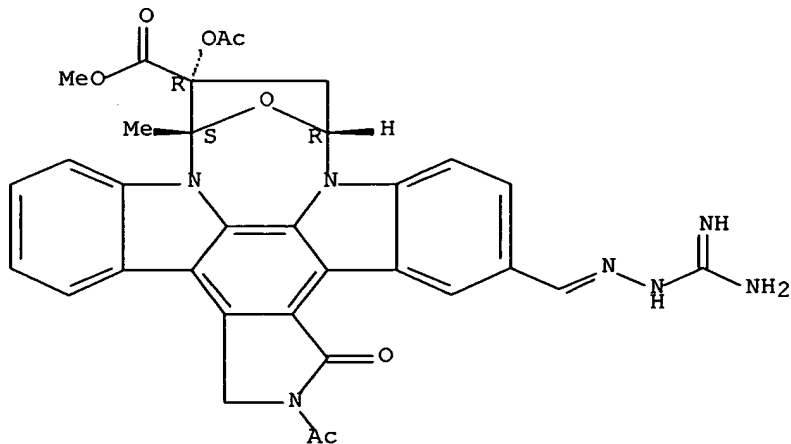
RN 167370-81-2 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(1H-1,2,4-triazol-3-ylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



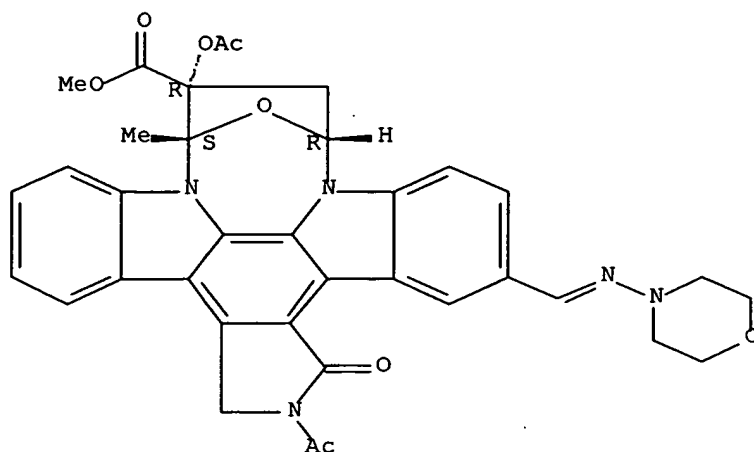
RN 167370-82-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[(aminoiminomethyl)hydrazono]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.



RN 167370-83-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-16-[(4-morpholinylimino)methyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.

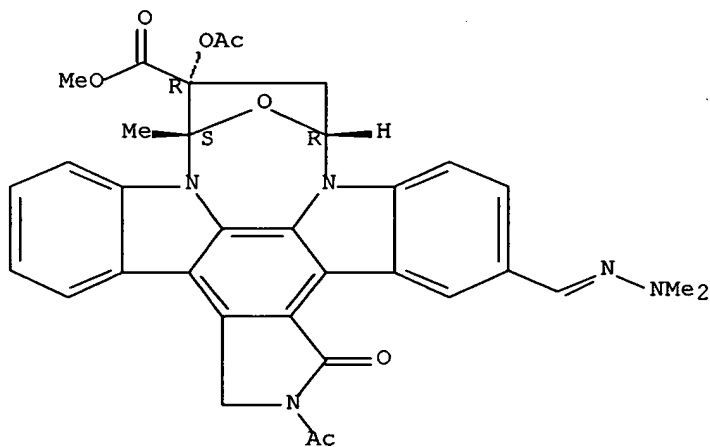


RN 167370-84-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(dimethylhydrazono)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

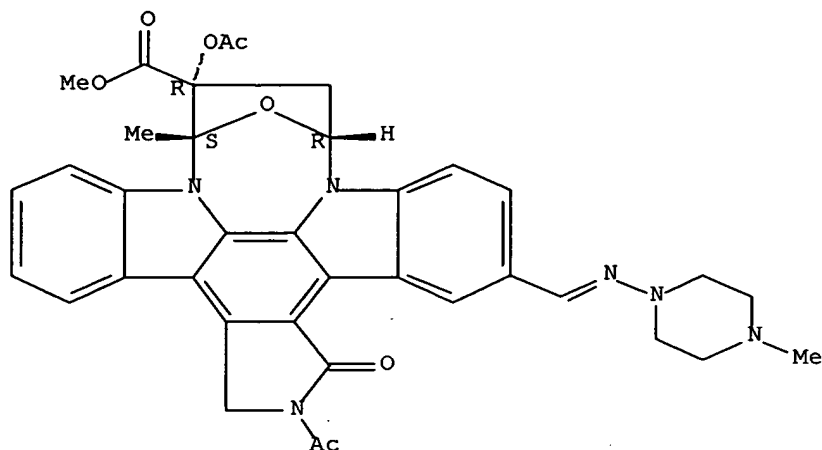


RN 167370-85-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-16-[(4-methyl-1-piperazinyl)imino]methyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

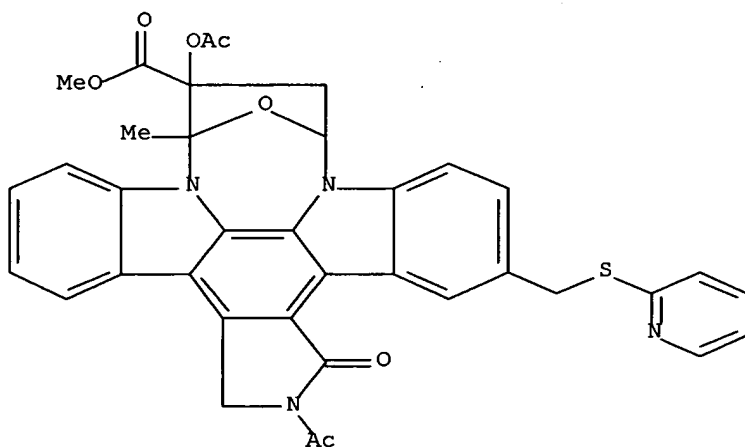
Double bond geometry unknown.



RN 167370-88-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(2-pyridinylthio)methyl]-, methyl ester, (9.alpha.,10.beta.,12.alpha.)- (9CI) (CA INDEX NAME)

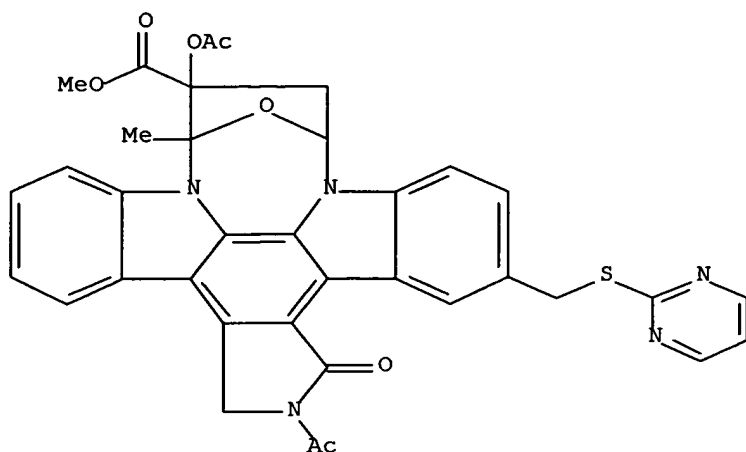
Currently available stereo shown.



RN 167370-89-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(2-pyrimidinylthio)methyl]-, methyl ester, (9.alpha.,10.beta.,12.alpha.)- (9CI) (CA INDEX NAME)

Currently available stereo shown.

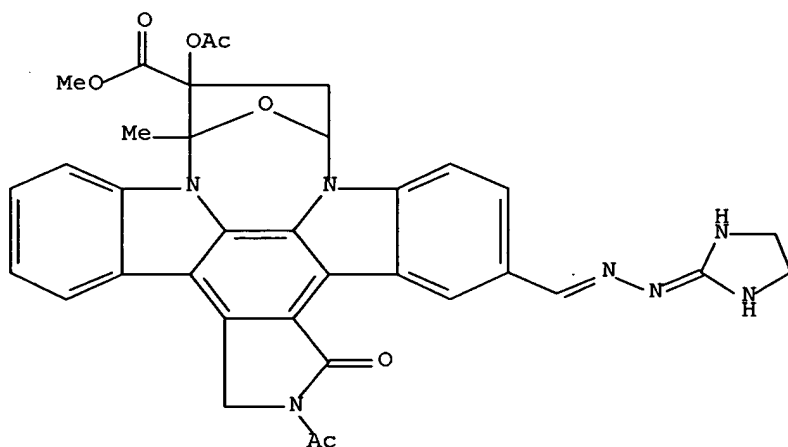


RN 167370-90-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[[(4,5-dihydro-1H-imidazol-2-yl)hydrazone]methyl]-2,3,9,10,11,12-hexahydro-

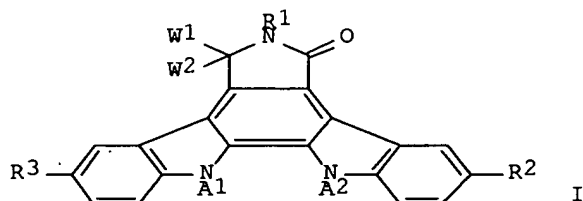
9-methyl-1-oxo-, methyl ester, (9.alpha.,10.beta.,12.alpha.)- (9CI) (CA INDEX NAME)

Currently available stereo shown.



L7 ANSWER 50 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1995:216587 CAPLUS
 DN 122:10020
 TI preparation of benzodiindole derivatives as antithrombotics
 IN Tamaoki, Tatsuya; Shiotsu, Yukimasa; Murakata, Chikara; Akinaga, Shiro;
 Okabe, Masami; Saitoh, Yutaka; Watanabe, Junichi; Shiraki, Takako
 PA Kyowa Hakko Kogyo Co., Ltd., Japan
 SO PCT Int. Appl., 65 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9406799 | A1 | 19940331 | WO 1993-JP1346 | 19930920 |
| | W: CA, JP, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | EP 630898 | A1 | 19941228 | EP 1993-919687 | 19930920 |
| | EP 630898 | B1 | 20011128 | | |
| | R: DE, ES, FR, GB, IT | | | | |
| | ES 2171416 | T3 | 20020916 | ES 1993-919687 | 19930920 |
| | US 5674867 | A | 19971007 | US 1994-244111 | 19940518 |
| PRAI | JP 1992-250941 | A | 19920921 | | |
| | WO 1993-JP1346 | W | 19930920 | | |
| OS | MARPAT 122:10020 | | | | |
| GI | | | | | |

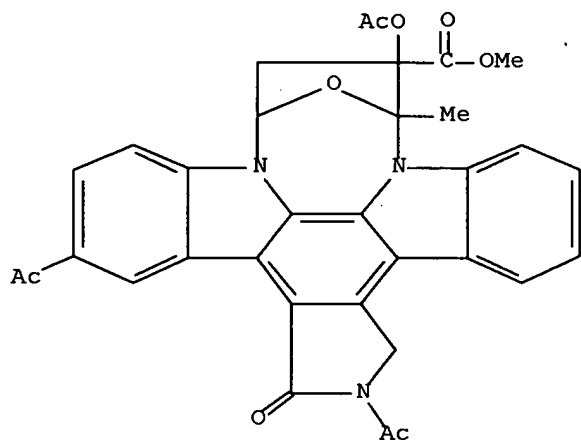


AB Title compds. I [R1 = H, alkyl, alkanoyl, benzyl, amino; R2 = H, OH, alkoxy, alkanoyl, halo, etc.; R3 = H, alkanoyl, halo, OH, alkoxy; W1, W2 = H, OH, alkylthio, etc.; A1, A2 = H, or together = 4-(methylamino)-2-methyl-3-methoxytetrahydro-2,6-pyrandiyl, etc.] are prepd. and their blood platelet aggregation inhibiting activities were evaluated. E.g., I [R1-
 R3 = H, W1 = H, W2 = OH, A1A2 = Q] at 1 nM showed 127% inhibition of blood platelet aggregation compared with 100% for the control.
 IT **159404-62-3P**
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of, as antithrombotic)

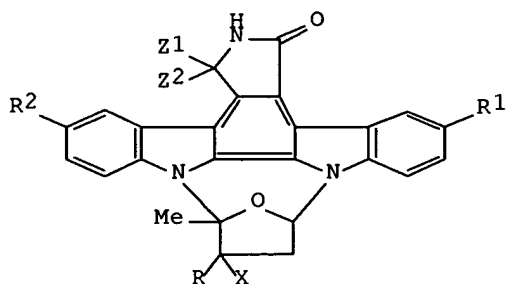
RN 159404-62-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,16-diacetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



L7 ANSWER 51 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1994:680945 CAPLUS
 DN 121:280945
 TI Preparation of bis-staurosporine and K-252a derivatives for enhancing neuron function
 IN Lewis, Michael E.; Neff, Nicola; Roberts-Lewis, Jill; Murakata, Chikara; Saito, Hiromitsu; Matsuda, Yuzuru; Kauer, James C.
 PA Cephalon, Inc., USA; Kyowa Hakko Kogyo Co., Ltd.
 SO PCT Int. Appl., 84 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9402488 | A1 | 19940203 | WO 1993-US6974 | 19930726 |
| | W: AU, BR, CA, FI, HU, JP, KR, NO, NZ, PT, RU, UA | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | EP 651754 | A1 | 19950510 | EP 1993-917337 | 19930726 |
| | EP 651754 | B1 | 19970423 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| | HU 71239 | A2 | 19951128 | HU 1995-192 | 19930726 |
| | JP 08501080 | T2 | 19960206 | JP 1993-504731 | 19930726 |
| | AU 675236 | B2 | 19970130 | AU 1993-46881 | 19930726 |
| | AU 9346881 | A1 | 19940214 | | |
| | EP 768312 | A2 | 19970416 | EP 1996-116661 | 19930726 |
| | EP 768312 | A3 | 19970604 | | |
| | EP 768312 | B1 | 20000906 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| | AT 152111 | E | 19970515 | AT 1993-917337 | 19930726 |
| | ES 2101331 | T3 | 19970701 | ES 1993-917337 | 19930726 |
| | BR 9306789 | A | 19981208 | BR 1993-6789 | 19930726 |
| | EP 1002534 | A1 | 20000524 | EP 1999-120008 | 19930726 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE | | | | |
| | AT 196142 | E | 20000915 | AT 1996-116661 | 19930726 |
| | ES 2151629 | T3 | 20010101 | ES 1996-116661 | 19930726 |
| | NZ 286198 | A | 20010629 | NZ 1993-286198 | 19930726 |
| | JP 2003113184 | A2 | 20030418 | JP 2002-244111 | 19930726 |
| | NO 9500242 | A | 19950307 | NO 1995-242 | 19950123 |
| | NO 9900542 | A | 19990205 | NO 1999-542 | 19950307 |
| PRAI | US 1992-920102 | A | 19920724 | | |
| | EP 1993-917337 | A3 | 19930726 | | |
| | EP 1996-116661 | A3 | 19930726 | | |
| | JP 1994-504731 | A3 | 19930726 | | |
| | WO 1993-US6974 | W | 19930726 | | |
| OS | MARPAT 121:280945 | | | | |
| GI | | | | | |



I

AB QNMeWNMeQ [Q = staurosporine residue; W = C(:Y)NHW'NHC(:Y); W' = C2-20 hydrocarbylene; Y = O, S], K-252a derivs. (I; e.g., R1, R2, Z1, Z2 = H;

X = CH2OH; R = OMe), etc., were prepd. Thus, staurosporine was treated with

1,6-hexamethylenebisisocyanate in EtOAc to give 1,6-hexamethylenebis(carbamoylstaurosporine). The latter potentiated the effect of nerve growth factor on stimulation of ornithine decarboxylase activity in PC-12 cells at all concns. tested. K-252a and numerous analogs increased choline acetyltransferase activity in fetal rat spinal cord cultures, promoted dorsal root ganglion neuron survival, etc.

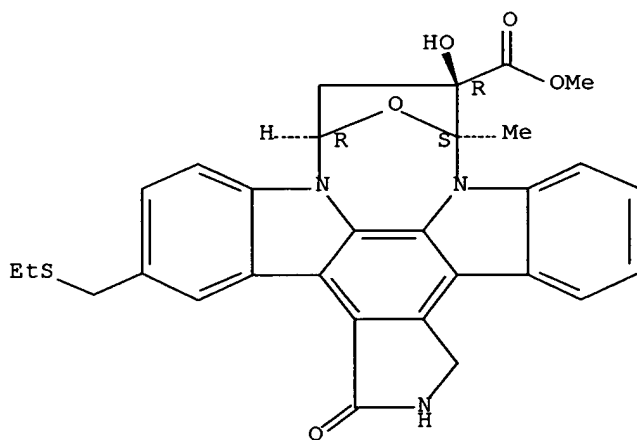
IT 121664-89-9 121665-11-0 156177-69-4
156177-73-0 156177-75-2 156177-79-6
156177-80-9 156256-87-0

RL: RCT (Réactant); RACT (Reactant or reagent)
(neuron function enhancing activity of)

RN 121664-89-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

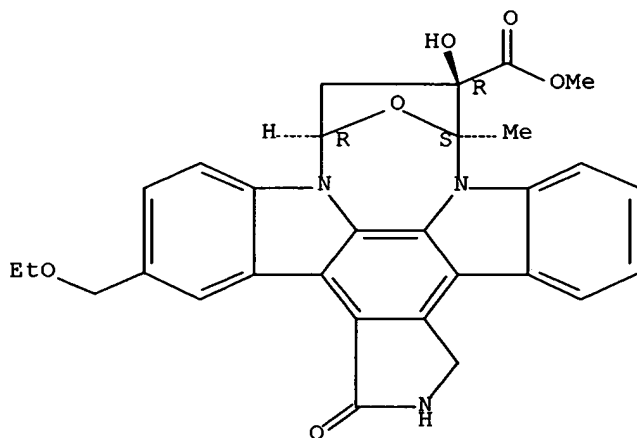


RN 121665-11-0 CAPLUS

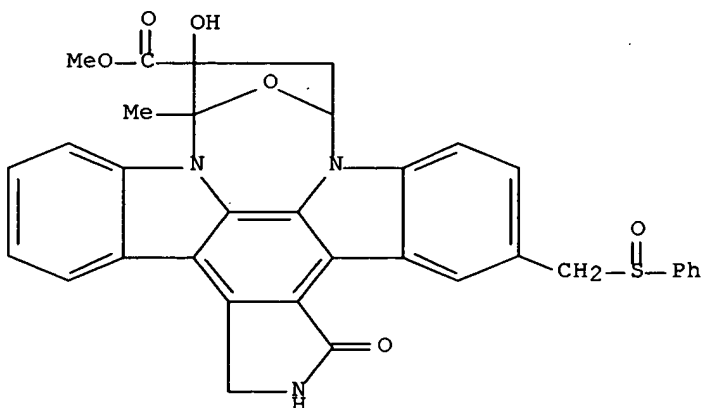
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-(ethoxymethyl)-

2,3,9,10,11,12-
hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

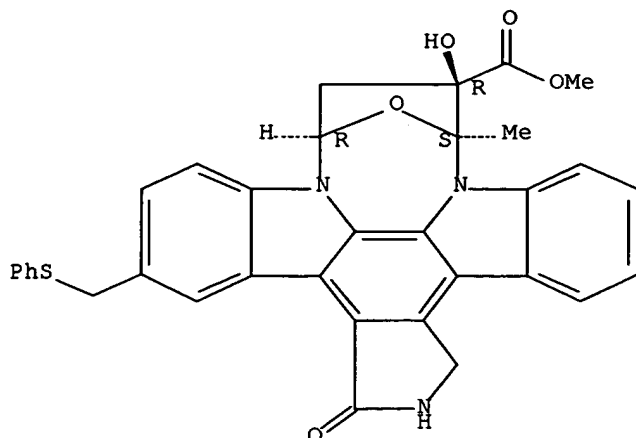


RN 156177-69-4 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(phenylsulfinyl)methyl]-, methyl ester, (9.alpha.,10.beta.,12.alpha.)- (9CI) (CA INDEX NAME)



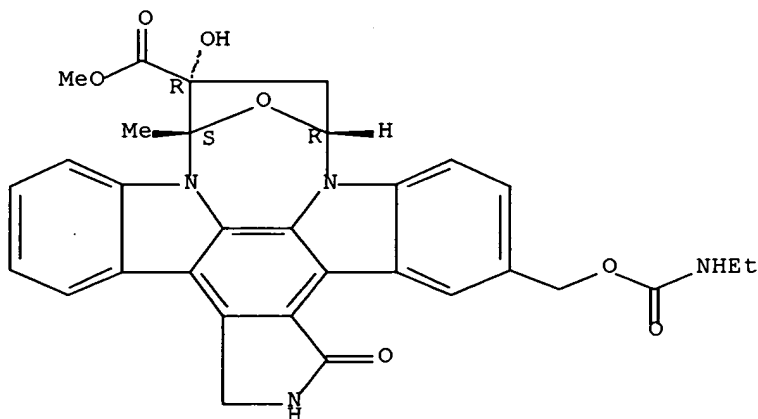
RN 156177-73-0 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(phenylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



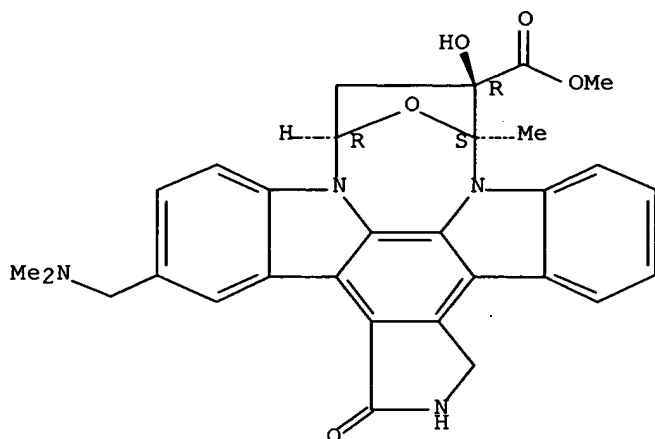
RN 156177-75-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[(ethylamino)carbonyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

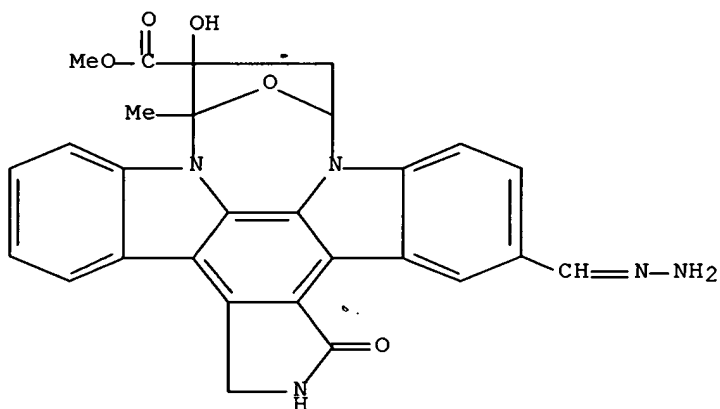


RN 156177-79-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(dimethylamino)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

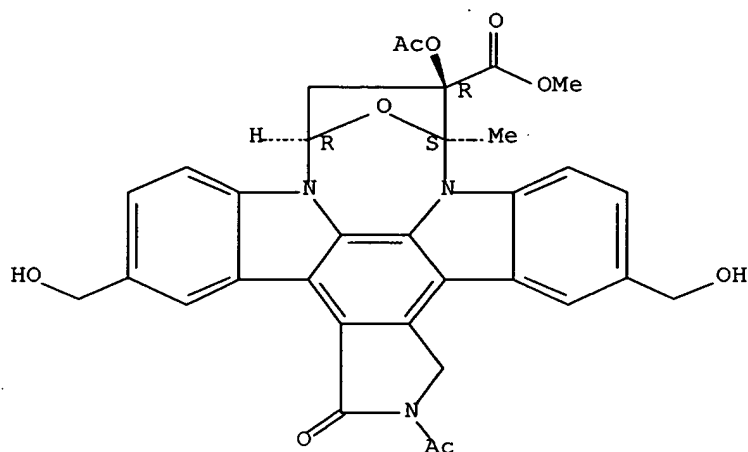


RN 156177-80-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-(hydrazonomethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9.alpha.,10.beta.,12.alpha.)- (9CI) (CA INDEX NAME)



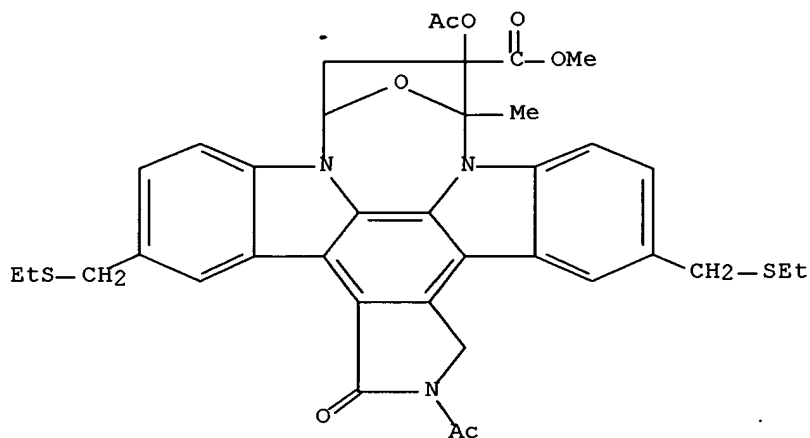
RN 156256-87-0 CAPLUS
 IT **156177-91-2P 156177-92-3P 156177-93-4P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as intermediate for neuron function enhancing drug)
 RN 156177-91-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 156177-92-3 CAPLUS

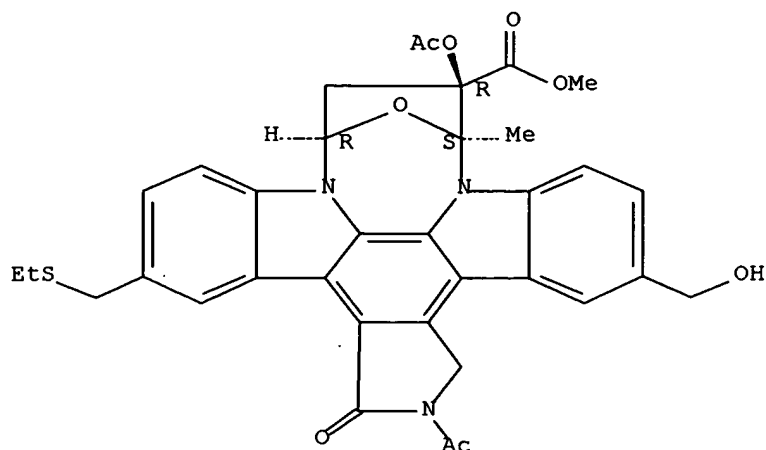
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9.alpha.,10.beta.,12.alpha.)- (9CI) (CA INDEX NAME)



RN 156177-93-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



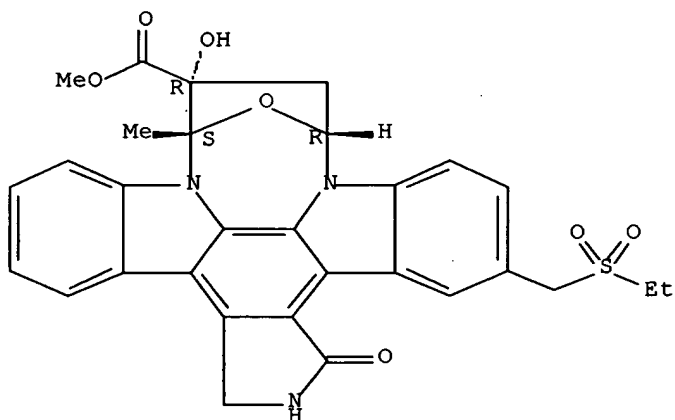
IT 156177-61-6P 156177-65-0P 156177-66-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, for enhancing neuron function)

RN 156177-61-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfonyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

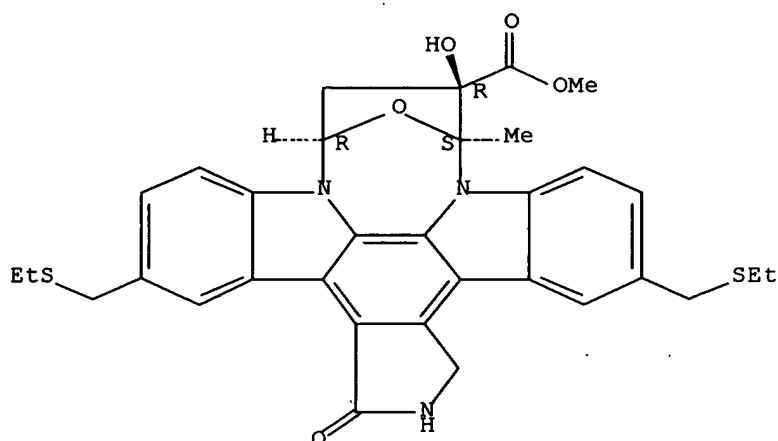
Absolute stereochemistry.



RN 156177-65-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

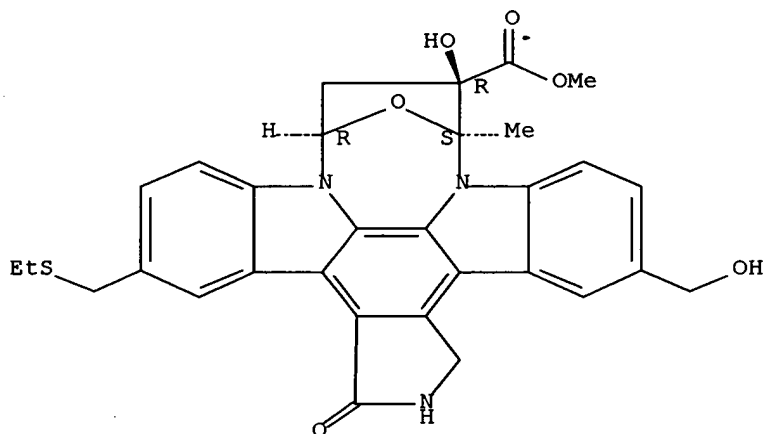
Absolute stereochemistry.



RN 156177-66-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



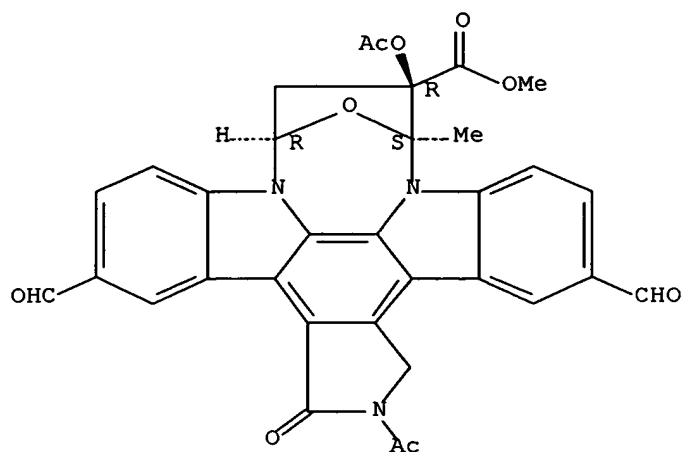
IT 121664-78-6 121664-90-2

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in prepn. of neuron function enhancing drug)

RN 121664-78-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-diformyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

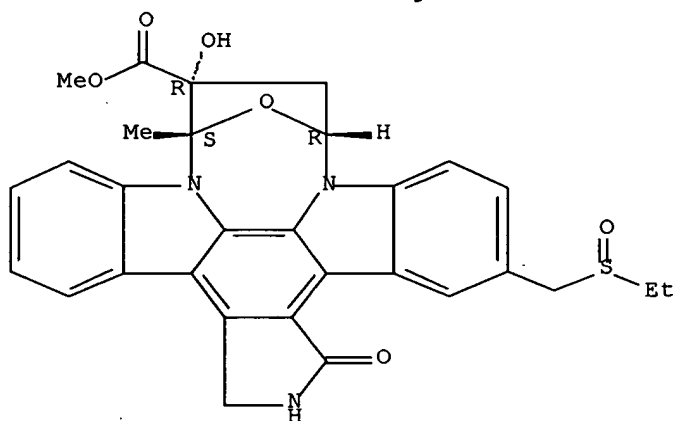
Absolute stereochemistry.



RN 121664-90-2 CAPLUS

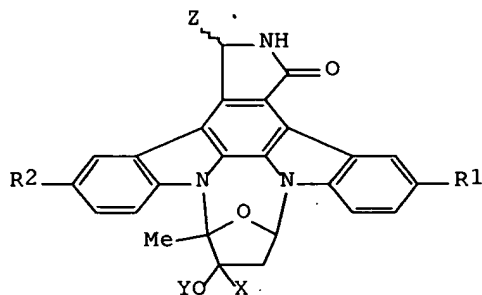
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfinyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 52 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1990:77860 CAPLUS
 DN 112:77860
 TI Preparation of K-252 derivatives having antitumor activity
 IN Murakata, Chikara; Sato, Akira; Kasai, Masaji; Kobayashi, Eiji;
 Morimoto,
 Makoto; Akinaga, Shiro
 PA Kyowa Hakko Kogyo Co., Ltd., Japan
 SO Eur. Pat. Appl., 20 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--------------------------------------|------|----------|-----------------|----------|
| PI | EP 323171 | A2 | 19890705 | EP 1988-312251 | 19881222 |
| | EP 323171 | A3 | 19900822 | | |
| | EP 323171 | B1 | 19941130 | | |
| | R: DE, FR, GB | | | | |
| | JP 01168689 | A2 | 19890704 | JP 1987-327857 | 19871224 |
| | JP 07113027 | B4 | 19951206 | | |
| | US 4877776 | A | 19891031 | US 1988-288787 | 19881222 |
| PRAI | JP 1987-327857 | | 19871224 | | |
| OS | CASREACT 112:77860; MARPAT 112:77860 | | | | |
| GI | | | | | |



I

AB K-252 derivs. (I; R1, R2 = H, OH; X = CO2H, CO2R, CH2OH; Y = H, R, COR;
 Z
 = OH, OR, SR; R = lower alkyl) which have protein kinase C
 (C-kinase)-inhibitory and cell growth-inhibitory activity and are useful
 as antitumor agents, are prepd. Thus, 1 mmol I (R1 = R2 = Z = H, Y =
 Me,
 X = CO2Me) was dissolved in AcOH and 1.1 mmol Pb(OAc)4 was added to the
 soln., followed by stirring 8 h under shading at room temp. to give 40%
 I
 (R1 = R2 = H, Y = Me, X = CO2Me, Z = OMe). Eight I were prepd. IC50
 values of I (R1 = R2 = Y = H, X = CH2OH, Z = SEt) in vitro was 0.18
 against C-kinase, 1.43 against human uterine cervical cancer HeLaS3
 cells,
 5.08 against human breast cancer cell MCF7, and 1.00 .mu.g/mL against

human colon adenocarcinoma cell COLO320DM vs. 0.016, 0.2, 0.51, and 0.27 .mu.g/mL, resp., for K252.

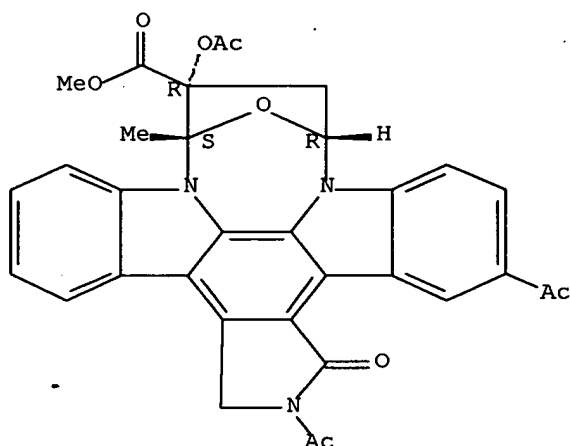
IT 118777-30-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for antitumor K252 deriv.)

RN 118777-30-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,16-diacetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 53 OF 54 CAPLUS COPYRIGHT 2003 ACS

AN 1989:477750 CAPLUS

DN 111:77750

TI K-252 derivatives as protein kinase C inhibitors, their preparation, and formulations containing them

IN Hirata, Tadashi; Mochida, Kenichi; Muragata, Tsutomu; Takahashi, Mitsuru;

Kase, Hiroshi; Yamada, Koji; Iwahashi, Kazuyuki; Sato, Akira; Kasai, Masaji; et al.

PA Kyowa Hakko Kogyo Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 40 pp.

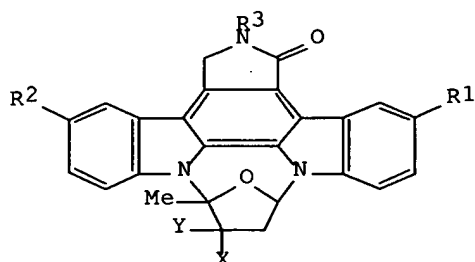
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|------------------|------|----------|-----------------|----------|
| PI | JP 63295588 | A2 | 19881201 | JP 1987-327858 | 19871224 |
| | JP 08026036 | B4 | 19960313 | | |
| PRAI | JP 1987-12719 | | 19870122 | | |
| OS | MARPAT 111:77750 | | | | |
| GI | | | | | |



I

AB The title compds. I [R1,R2 = H, Me, hydroxymethyl, lower alkoxyethyl, alkylthiomethyl, etc.; R3 = H, Cl, lower alkanoyl, carbamoyl, etc.; X = hydroxymethyl, CO2H, lower alkoxyethyl, etc.; Y = OH, lower alkanoyloxy, etc., or YX = OMeCH2OCH2, OCSNHCH2, etc.; provisos are given (for example, when X = hydroxymethyl, CO2H, lower alkoxyethyl, at least

one of R1-R3 must be other than H)], useful as protein kinase C inhibitors, were prepd. Treatment of I (R1 = NH2, R2 = H, R3 = Ac, X = CO2Me, Y = OAc) (prepn. given) with MeONa, followed by workup and acidification, gave I.HCl (R1 = NH2, R2 = R3 = H, X = CO2Me, Y = OH)

(II).

II in vitro exhibited an IC50 of 0.175 .mu.g/mL against protein kinase

C.

A tablet formulation contg. I (R1 = R2 = R3 = H, X = CH:OH, Y = OH)

100,

starch 18, lactose 40, Ca CM-cellulose 10 g, hydroxypropylcellulose, and Mg stearate (amt. unspecified) is given.

IT 118735-80-1P 118777-30-3P 118777-58-5P

121664-77-5P 121664-78-6P 121664-79-7P
 121664-80-0P 121664-81-1P 121664-86-6P
 121664-87-7P 121664-88-8P 121664-89-9P
 121664-90-2P 121665-10-9P 121665-11-0P
 121665-12-1P

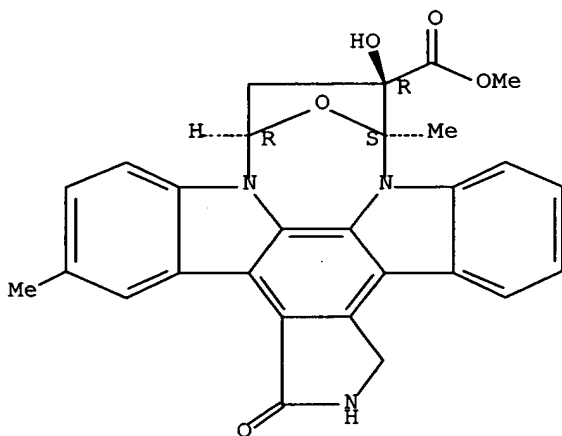
RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as protein kinase C inhibitor)

RN 118735-80-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9,16-dimethyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA

INDEX
 NAME)

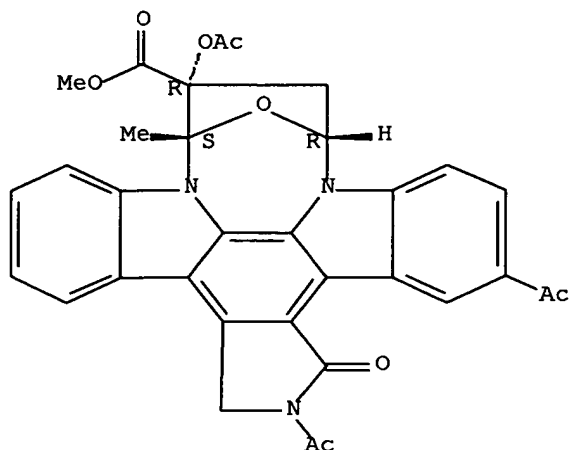
Absolute stereochemistry.



RN 118777-30-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,16-diacetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

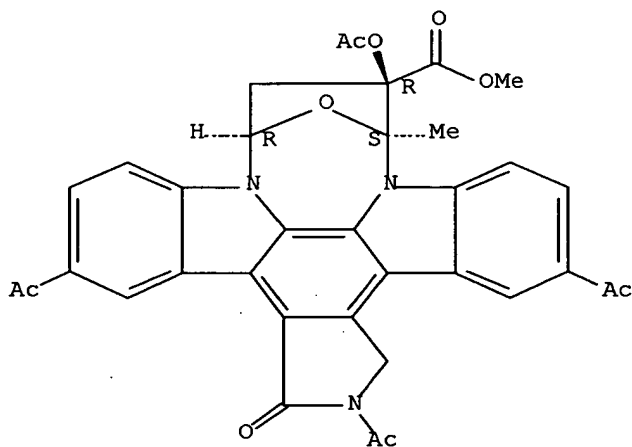
Absolute stereochemistry.



RN 118777-58-5 CAPLUS

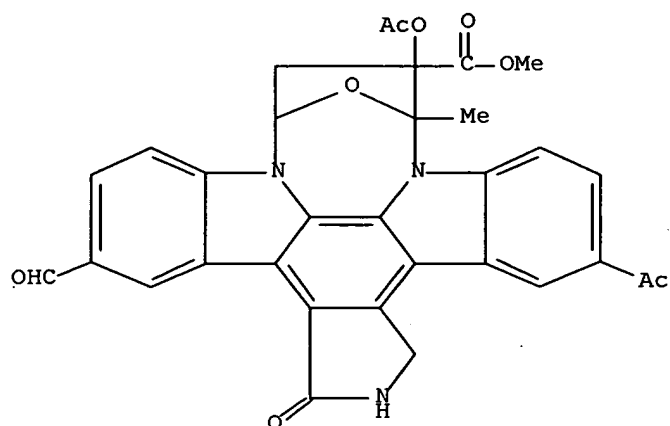
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,5,16-triacetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 121664-77-5 CAPLUS

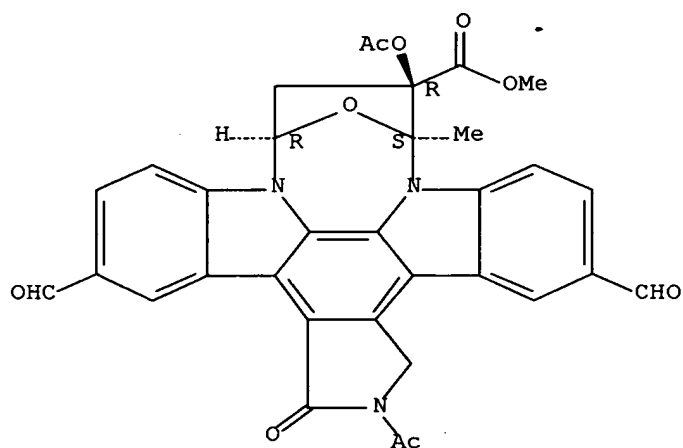
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-acetyl-10-(acetyloxy)-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



RN 121664-78-6 CAPLUS

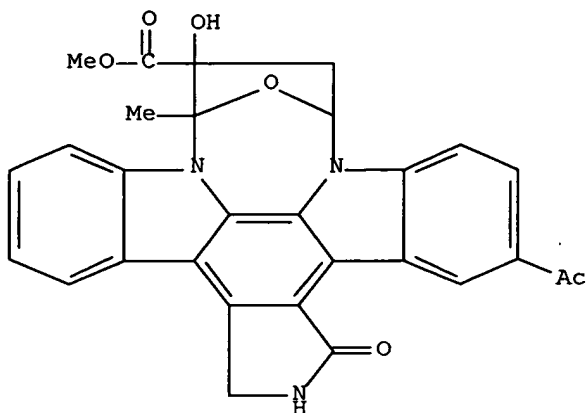
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-diformyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

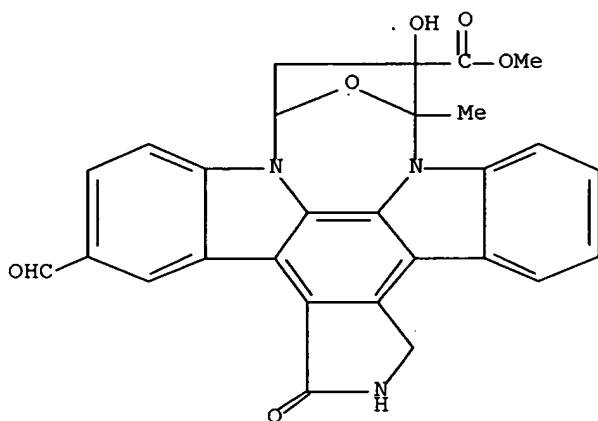


RN 121664-79-7 CAPLUS

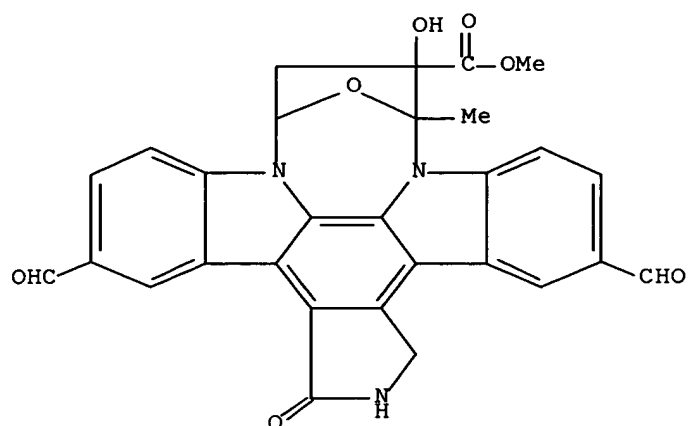
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-acetyl-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



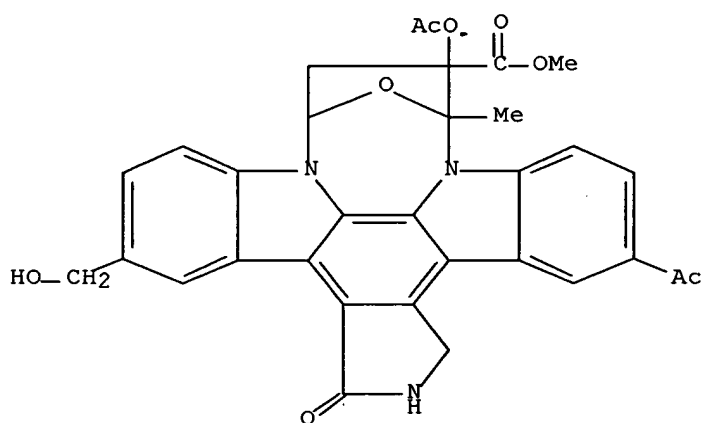
RN 121664-80-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-formyl-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



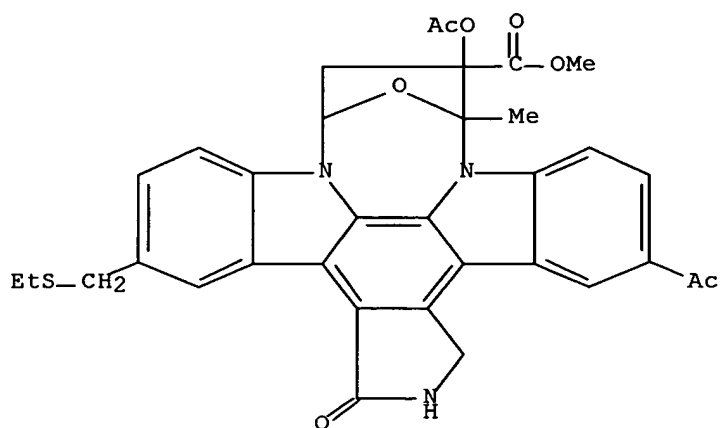
RN 121664-81-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-diformyl-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



RN 121664-86-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester
 (9CI) (CA INDEX NAME)

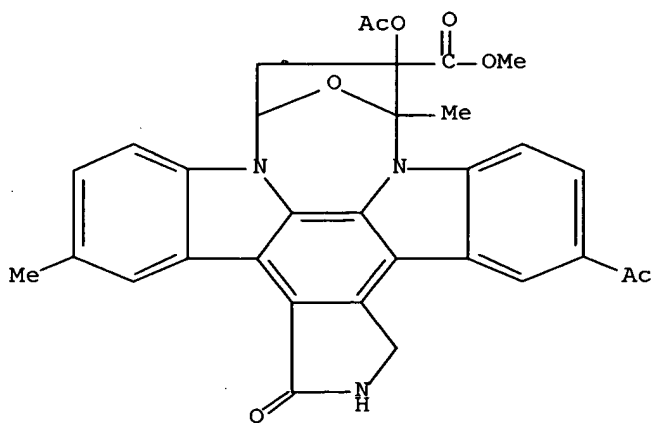


RN 121664-87-7 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-acetyl-10-(acetyloxy)-16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.alpha.,12.alpha.)]- (9CI) (CA INDEX NAME)



RN 121664-88-8 CAPLUS

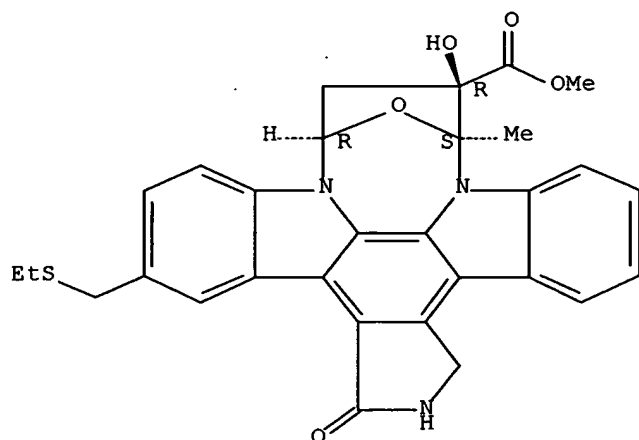
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9,15-dimethyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.alpha.,12.alpha.)]- (9CI) (CA INDEX NAME)



RN 121664-89-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

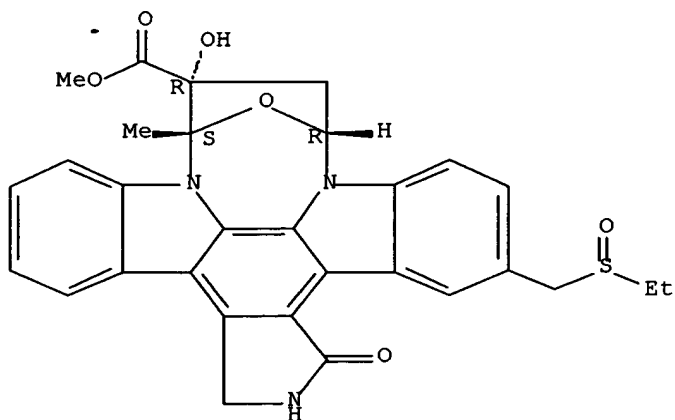
Absolute stereochemistry.



RN 121664-90-2 CAPLUS

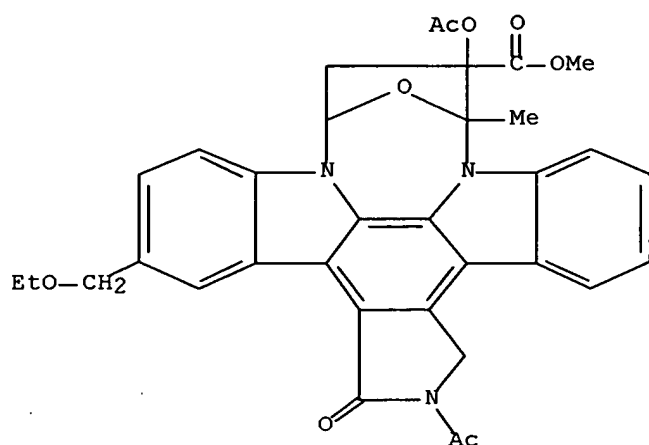
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfinyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



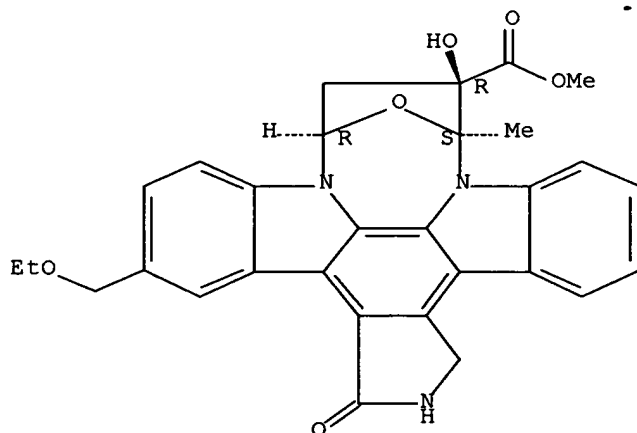
RN 121665-10-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-(ethoxymethyl)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, [9S-(9.alpha.,10.alpha.,12.alpha.)]- (9CI) (CA INDEX NAME)

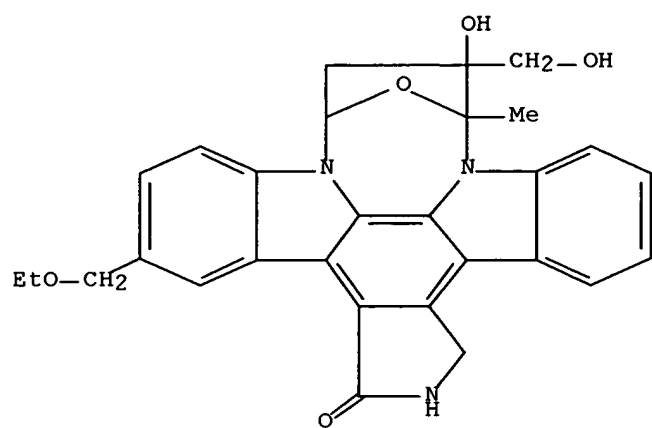


RN 121665-11-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.

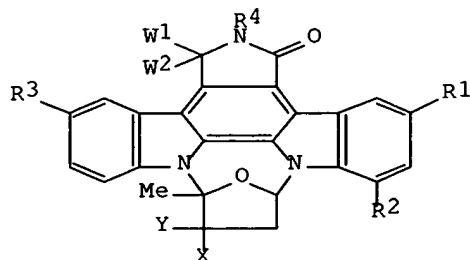


RN 121665-12-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocin-1-one, 16-(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-10-(hydroxymethyl)-9-methyl-, [9S-(9.alpha.,10.alpha.,12.alpha.)]- (9CI) (CA INDEX NAME)



L7 ANSWER 54 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1989:75861 CAPLUS
 DN 110:75861
 TI Preparation of K-252 derivatives as anticancer agents
 IN Murakata, Chikara; Sato, Akira; Takahashi, Mitsuru; Kobayashi, Eiji;
 Morimoto, Makoto; Akinaga, Shiro; Hirata, Tadashi; Mochida, Kenichi;
 Kase,
 Hiroshi; et al.
 PA Kyowa Hakko Kogyo Co., Ltd., Japan
 SO PCT Int. Appl., 101 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--------------------|------|----------|-----------------|----------|
| PI | WO 8807045 | A1 | 19880922 | WO 1987-JP144 | 19870309 |
| | W: JP, US | | | | |
| | RW: DE, FR, GB | | | | |
| | EP 303697 | A1 | 19890222 | EP 1987-901672 | 19870309 |
| | EP 303697 | B1 | 19971001 | | |
| | R: DE, FR, GB | | | | |
| | US 4923986 | A | 19900508 | US 1988-273519 | 19881108 |
| PRAI | WO 1987-JP144 | | 19870309 | | |
| OS | CASREACT 110:75861 | | | | |
| GI | | | | | |



I

AB Title compds. I [R1 = H, Me, OH, HOCH2, alkoxy, Cl, Br, NR5R6 when R3 = H,
 or R1 = R3 = OH, alkoxy, NH2; R2 = H, NH2; R4 = H, Cl, carbamoyl, alkyl,
 amino, (CH2)2R7; R5, R6 = alkyl; 1 of R5, R6 = H, carbamoyl,
 alkylaminocarbonyl and other = H; R7 = Br, NH2, dialkylamino, OH,
 hydroxyalkylamino; W1, W2 = H or W1W2 = O; X = H, CHO, alkoxycarbonyl,
 (substituted)aminocarbonyl, substituted Me, CH:NR8; R8 = OH, NH2,
 guanidino, 2-imidazolylamino; Y = OH, carbamoyloxy; XY = O, CH2O,
 CH2OCO2,
 CH2OC(:S)O, CH2NR9CO2, CH2NHC(S)O, CH2OSO2, CH2N:CR10O; R9 = H, alkyl,
 aryl, CH2CHO, CH2CH(OH)CH2OH, CH2CH:NNHC(:NH)NH2; R10 = alkyl,
 alkylthio;
 several restrictions are stated] are prepd. A soln. of KT5556 (I; R1 -
 R4

= W1 = W2 = H; X = CO2 H; Y = OH) and Ac2O in pyridine was stirred at room temp. to give 97% I (R1 - R4 = W1 = W2 = H; X = CO2H; Y = OAc), which was treated with SOCl2 to afford 88% I (X = COCl). A soln. of the acid chloride, HONH2.bul.HCl, and NEt3 in CHCl3 was stirred at room temp. for 6 h, followed by treatment with 1 N NaOH and MeOH, to give 49% I (R1 - R4 = W1 = W2 = H; X = CONHOH; Y = OH), which had IC50 of 0.005, 0.59, and 0.14 .mu.g/mL against protein kinase C, HeLaS3 human cancer cells, and PC-10 human cancer cells, resp.

IT 118777-30-3P 118777-58-5P 118777-60-9P
118777-62-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

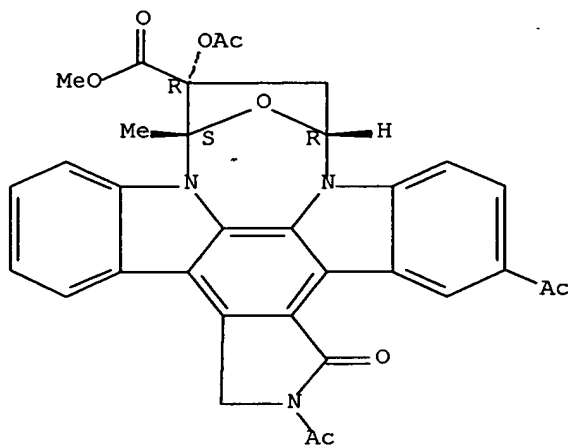
(Reactant or reagent)

(prepn. and reaction of, in prepn. of K-252 deriv. anticancer agents)

RN 118777-30-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,16-diacetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

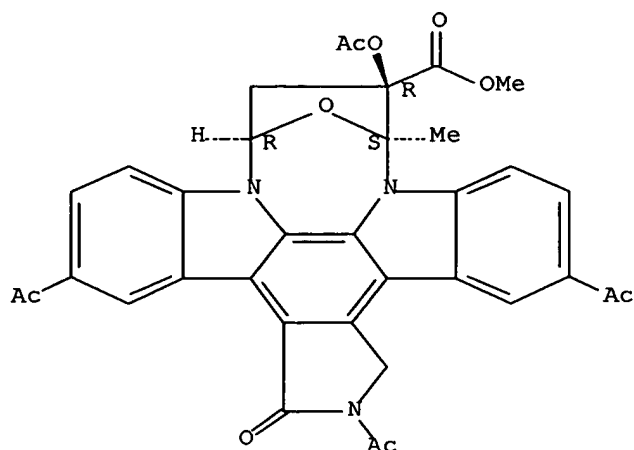
Absolute stereochemistry.



RN 118777-58-5 CAPLUS

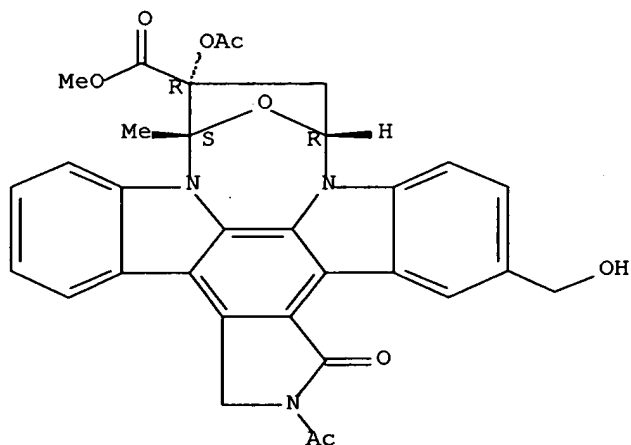
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,5,16-triacetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

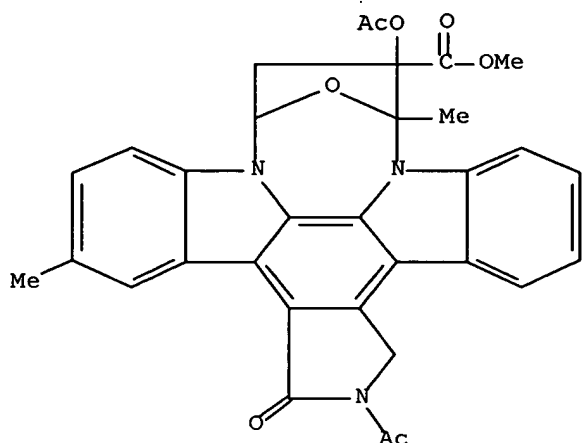


RN 118777-60-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 118777-62-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9,16-dimethyl-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



IT 118735-79-8P 118735-80-1P 118735-86-7P

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological

study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

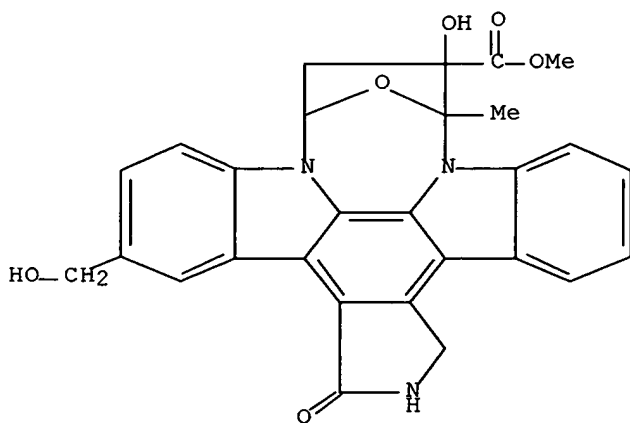
(prepn. of, as anticancer agent)

RN 118735-79-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester (9CI) (CA

INDEX

NAME)



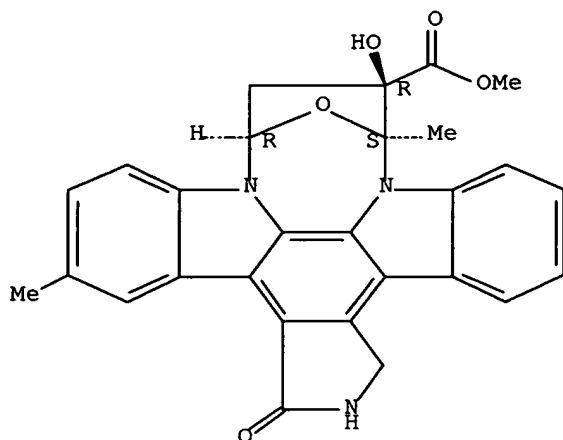
RN 118735-80-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9,16-dimethyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA

INDEX

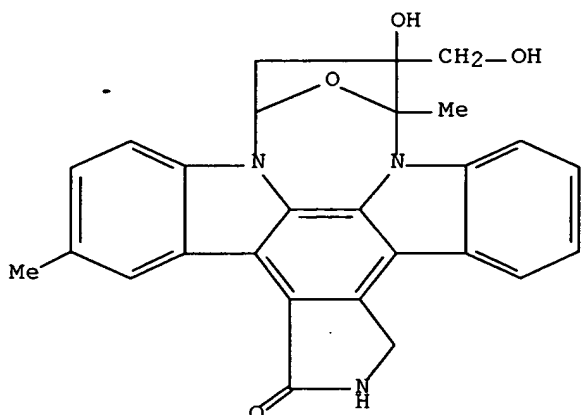
NAME)

Absolute stereochemistry.



RN 118735-86-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocin-1-one, 2,3,9,10,11,12-hexahydro-10-hydroxy-10-(hydroxymethyl)-9,16-dimethyl- (9CI) (CA INDEX NAME)



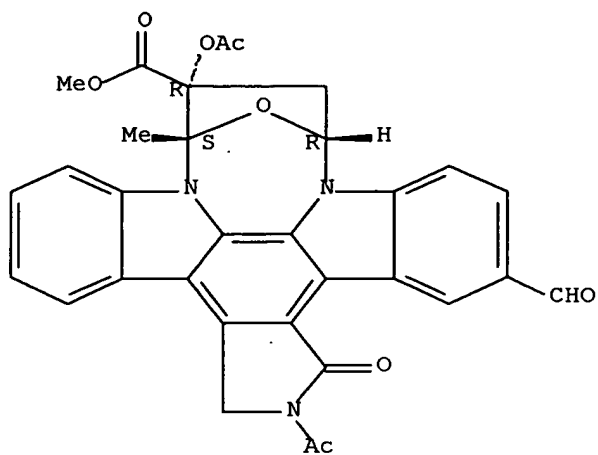
IT 118777-59-6P 118777-61-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for K-252 deriv. anticancer agents)

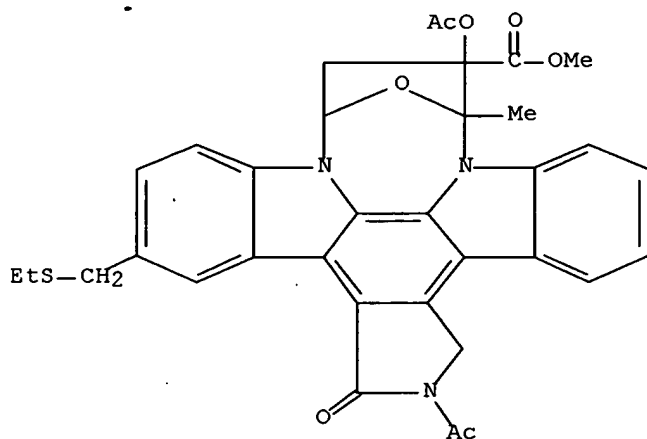
RN 118777-59-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



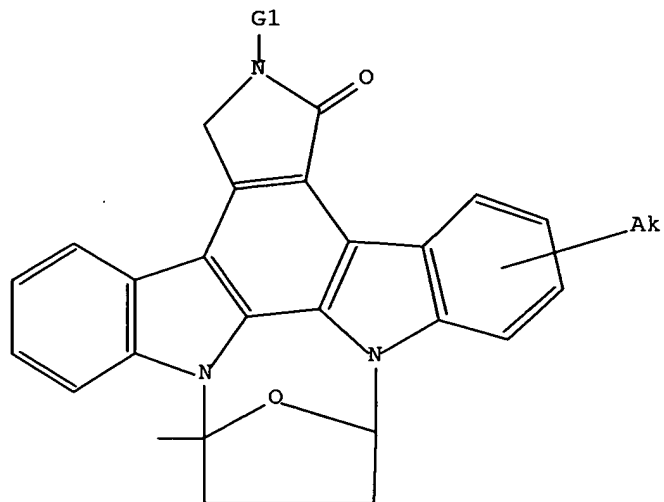
RN 118777-61-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester
 (9CI) (CA INDEX NAME)



=> d l1; d l2; d his; log y

L1 HAS NO ANSWERS

L1 STR

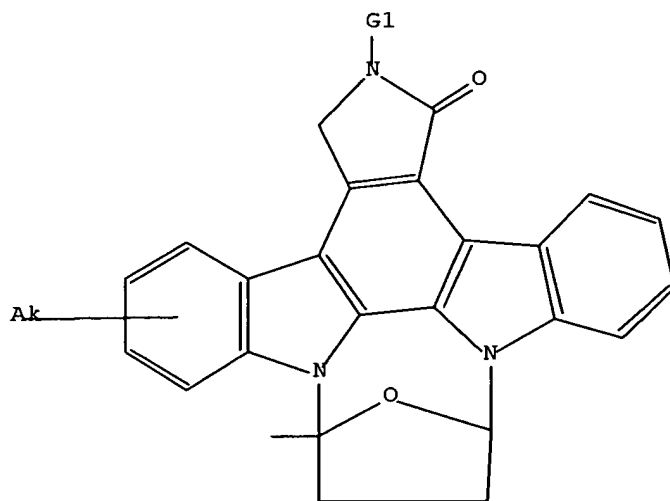


G1 C,H

Structure attributes must be viewed using STN Express query preparation.

L2 HAS NO ANSWERS

L2 STR



G1 C,H

Structure attributes must be viewed using STN Express query preparation.

(FILE 'HOME' ENTERED AT 10:49:10 ON 14 MAY 2003)

FILE 'REGISTRY' ENTERED AT 10:49:19 ON 14 MAY 2003

L1 STRUCTURE UPLOADED
L2 STRUCTURE UPLOADED
L3 14 S L1
L4 9 S L2
L5 14 S L1 OR L2
L6 368 S L1 OR L2 FUL

 FILE 'CAPLUS' ENTERED AT 10:50:54 ON 14 MAY 2003
L7 54 S L6

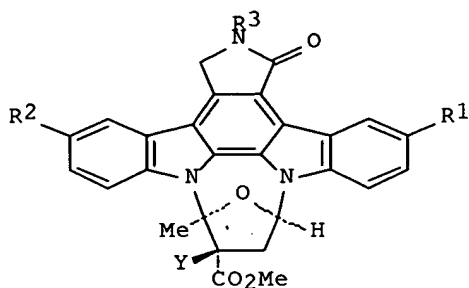
| | | |
|--|------------|---------|
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 247.03 | 473.79 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| CA SUBSCRIBER PRICE | -35.15 | -35.15 |

STN INTERNATIONAL LOGOFF AT 10:54:03 ON 14 MAY 2003

App '15

L7 ANSWER 12 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2001:772131 CAPLUS
 DN 135:318605
 TI Preparation of derivatives of the alkaloid K-252a for pharmaceutical use
 in the treatment of neurological disorders
 IN Hudkins, Robert L.; Mallamo, John P.; Hamano, Masami; Tanaka, Reiko;
 Murakata, Chikara
 PA Cephalon, Inc., USA
 SO U.S., 43 pp., Cont.-in-part of U.S. Ser. No. 657,366.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|------|----------|-----------------|----------|
| PI | US 6306849 | B1 | 20011023 | US 1997-867084 | 19970602 |
| | CN 1226893 | A | 19990825 | CN 1997-196985 | 19970602 |
| | ES 2183184 | T3 | 20030316 | ES 1997-927906 | 19970602 |
| | KR 2000016289 | A | 20000325 | KR 1998-709862 | 19981203 |
| PRAI | US 1996-657366 | A2 | 19960603 | | |
| OS | MARPAT 135:318605 | | | | |
| GI | | | | | |



I

AB Analogs of alkaloid K-252a, such as indolocarbazole derivs. I [R1, R2 =
 H,
 acyl, alkyl, alkenyl, alkynyl, hydroxyalkyl, alkylthioalkyl,
 carboxyalkyl,
 etc.; R3 = H, COMe; Y = OH, OCOMe] which inhibit interleukin-2 prodn.,
 have immunosuppressive activity and enhance the function and/or survival
 of a trophic factor responsive cell, were prepd. for therapeutic use in
 treatment of neurol. disorders. Thus, I (R1 = R2 = CH:CHCO2Me, R3 = H,
 Y
 = OH) was prepd. via olefinic coupling of the N,O-
 diacetyldicarboxaldehyde
 I (R1 = R2 = CHO, R3 = COMe, Y = OCOMe) with Ph3P:CHCO2Me by refluxing
 for
 4 h in CHCl3 followed by hydrolysis of the resulting N,O-diacetyl deriv.
 I
 (R1 = R2 = CH:CHCO2Me, R3 = COMe, Y = OCOMe) using a MeONa/MeOH soln. in
 CH2Cl2 for 30 min. The prepd. indolocarbazoles were evaluated for their

ability to increase choline acetyltransferase (ChAT) activity.

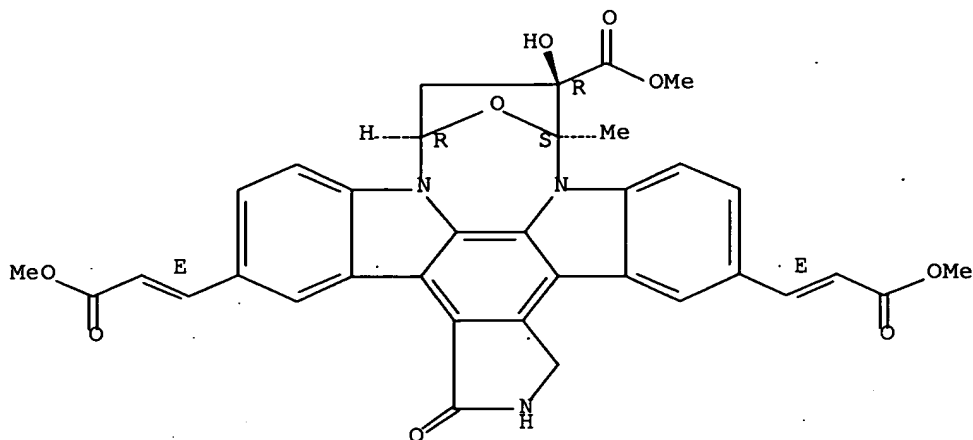
IT 200632-36-6P 200632-38-8P 200632-43-5P
200632-48-0P 200632-50-4P 200632-52-6P
200632-55-9P 200632-57-1P 200632-59-3P
200632-61-7P 200632-62-8P 200632-71-9P
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200633-81-4P 200633-95-0P 200634-04-4P
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367527-14-8P 367527-16-0P 367527-42-2P
367527-46-6P 367527-47-7P 367527-48-8P
367527-49-9P

RL: BAC (Biological activity or effector, except adverse); BSU
(Biological
study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT
(Reactant or reagent); USES (Uses)
(prepn. of derivs. of the alkaloid K-252a for pharmaceutical use in
the
treatment of neurol. disorders)

RN 200632-36-6 CAPLUS

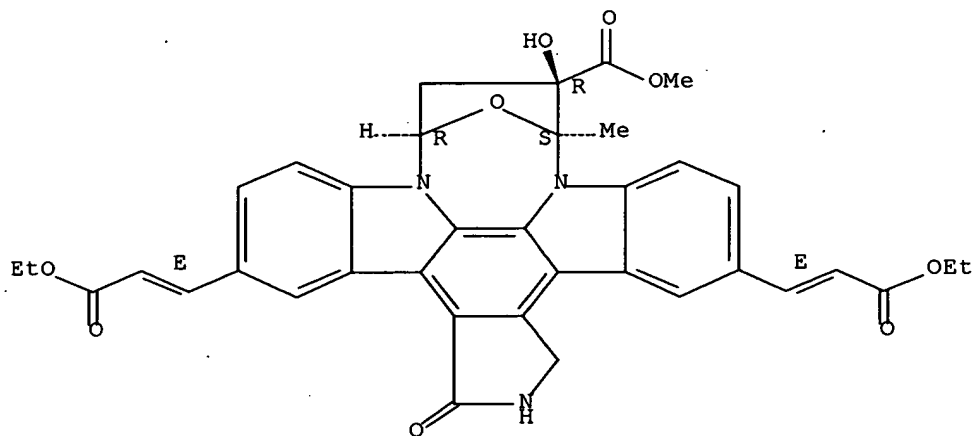
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-
hydroxy-5,16-bis[(1E)-3-methoxy-3-oxo-1-propenyl]-9-methyl-1-oxo-,
methyl
ester; (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



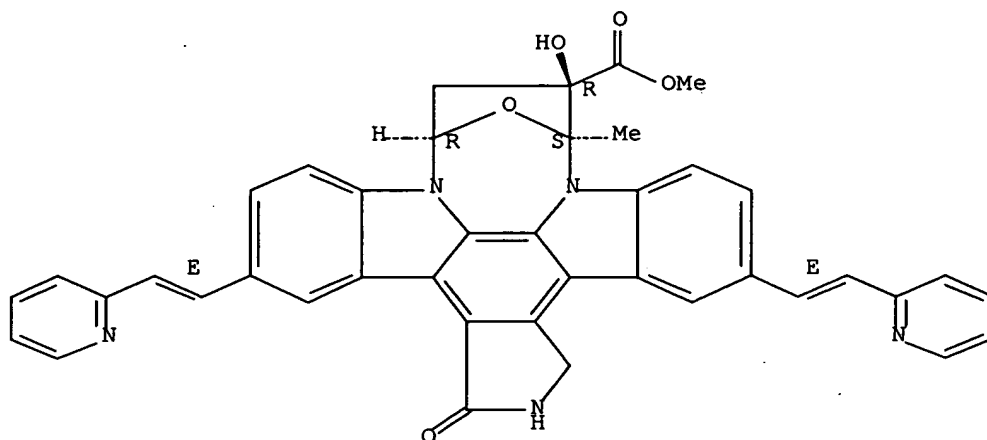
RN 200632-38-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(1E)-3-ethoxy-3-oxopropenyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 200632-43-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

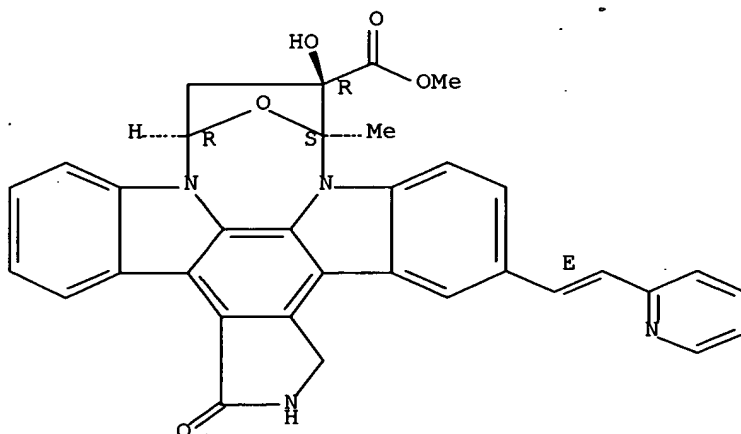


RN 200632-48-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

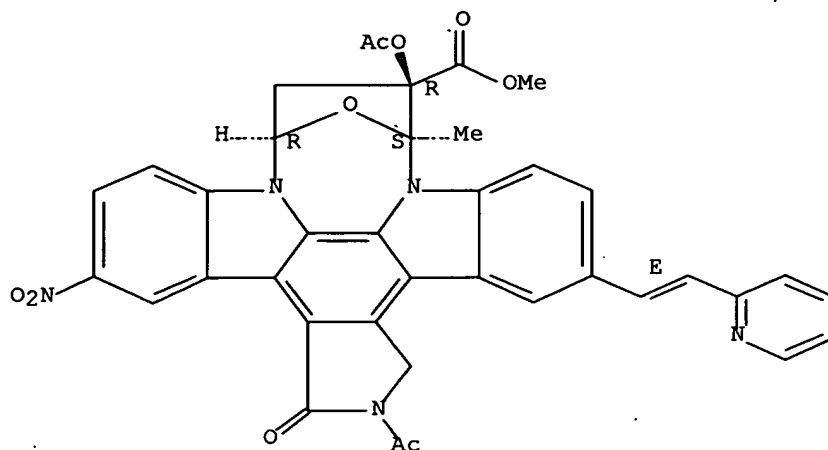


RN 200632-50-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-16-nitro-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

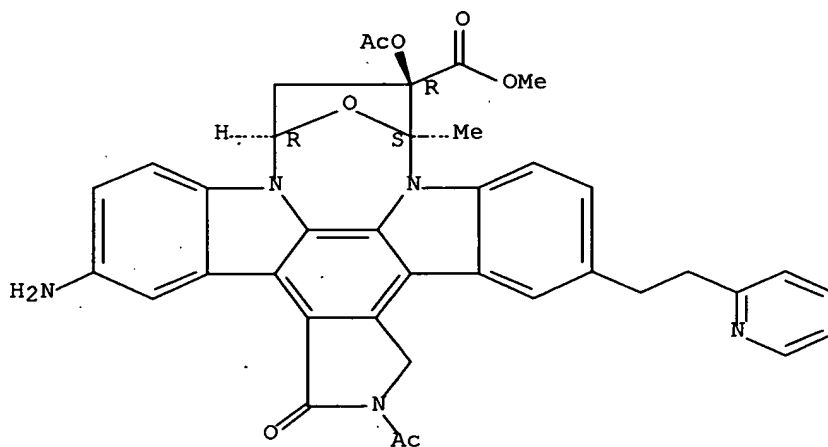
Absolute stereochemistry.

Double bond geometry as shown.



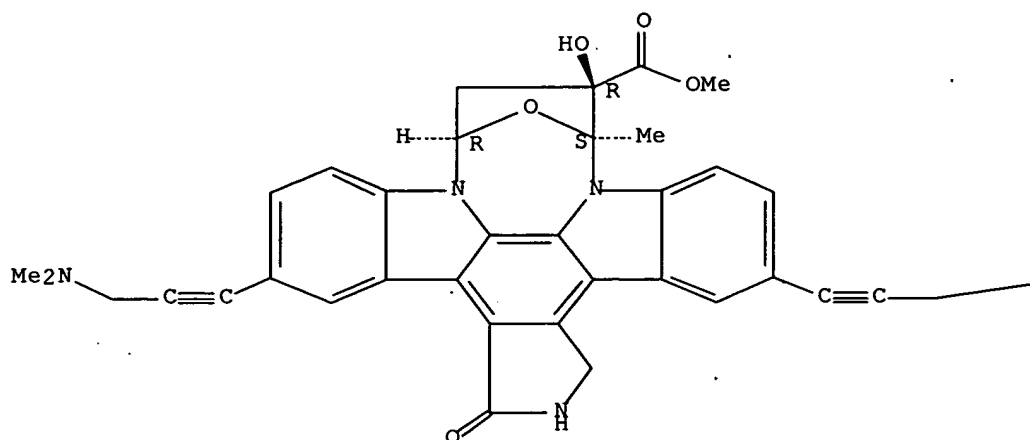
RN 200632-52-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-amino-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200632-55-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[3-(dimethylamino)-1-propynyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

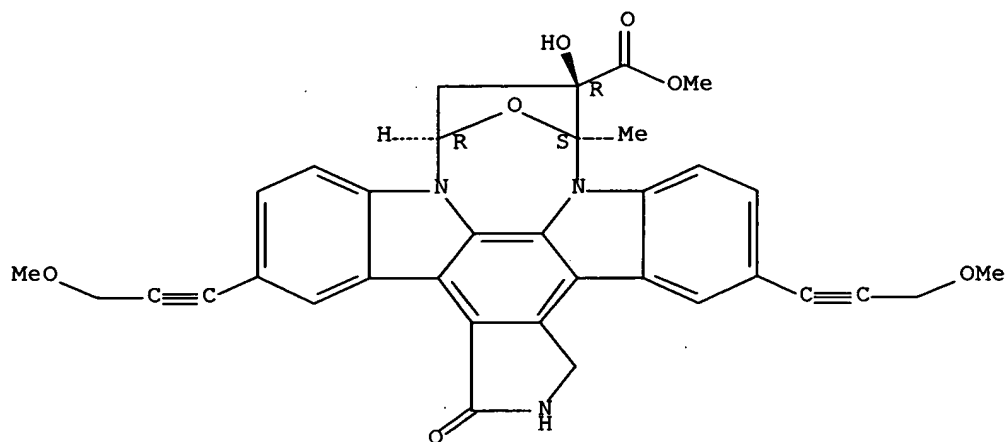
Absolute stereochemistry.



—NMe₂

RN 200632-57-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(3-methoxy-1-propynyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

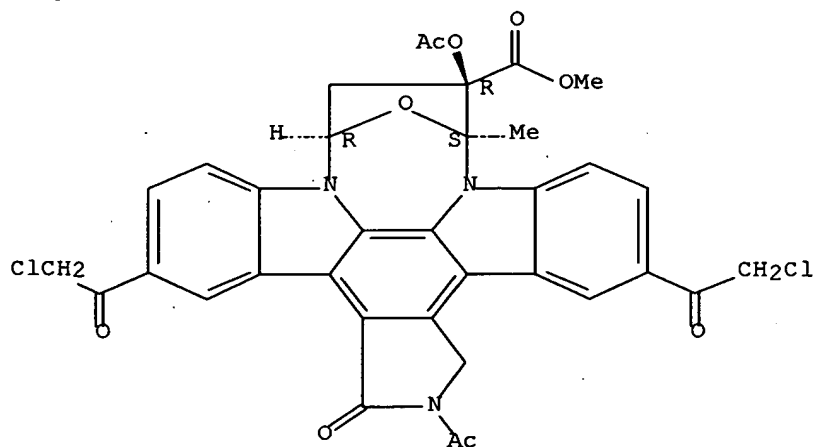
Absolute stereochemistry.



RN 200632-59-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis(chloroacetyl)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester,
(9S,10R,12R)- (9CI) (CA INDEX NAME)

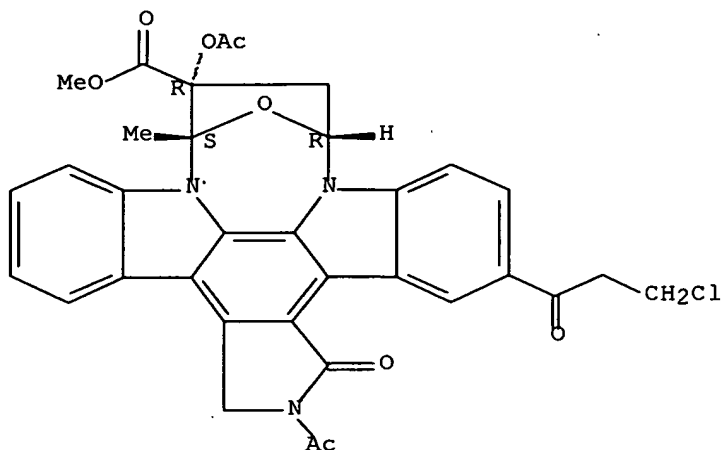
Absolute stereochemistry.



RN 200632-61-7 CAPLUS

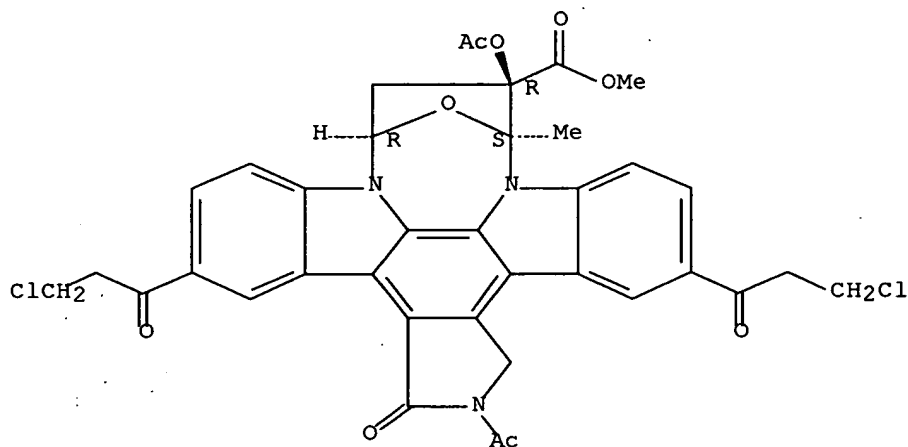
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-(3-chloro-1-oxopropyl)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



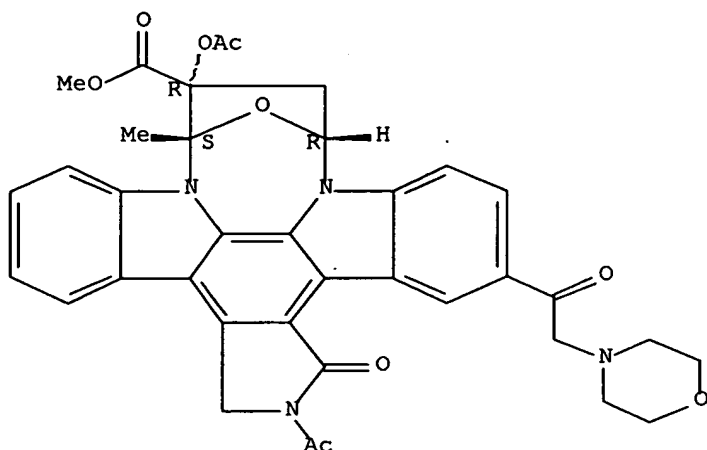
RN 200632-62-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis(3-chloro-1-oxopropyl)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



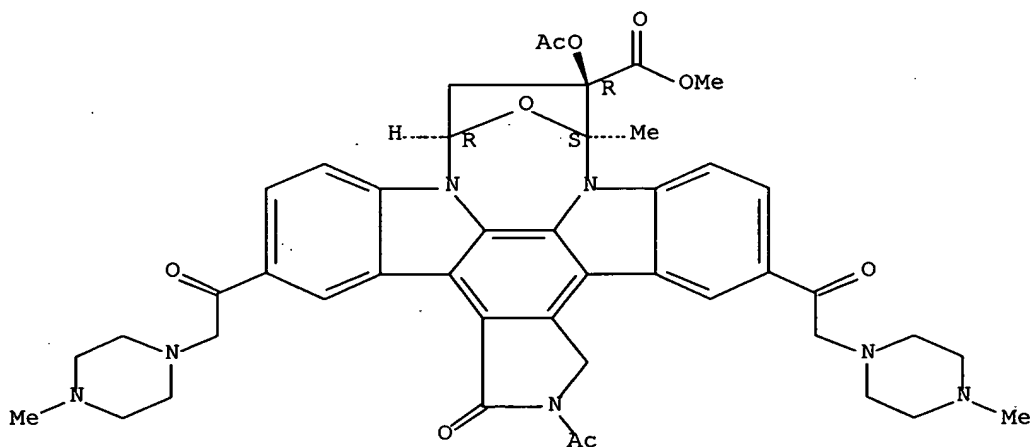
RN 200632-71-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-16-(4-morpholinylacetyl)-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



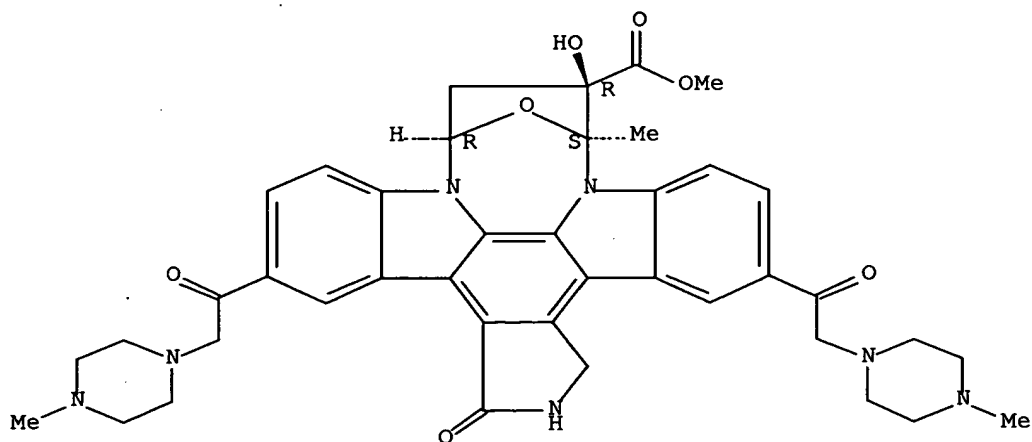
RN 200632-74-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-5,16-bis[(4-methyl-1-piperazinyl)acetyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200632-75-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[(4-methyl-1-piperazinyl)acetyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

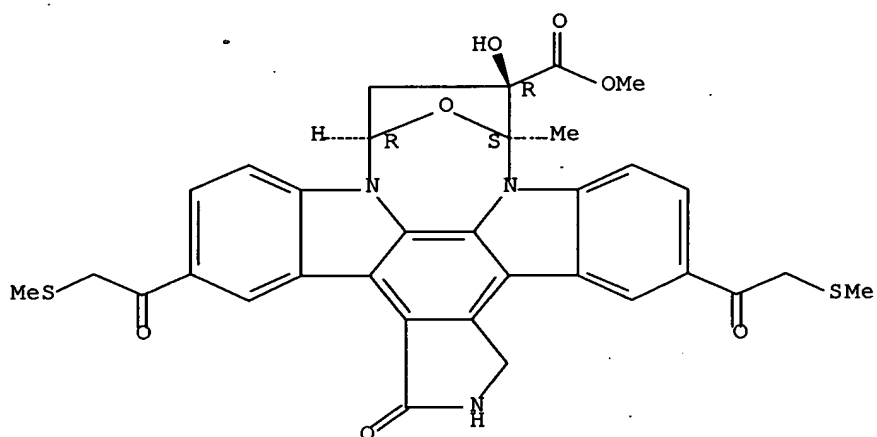
Absolute stereochemistry.



RN 200632-78-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[(methylthio)acetyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

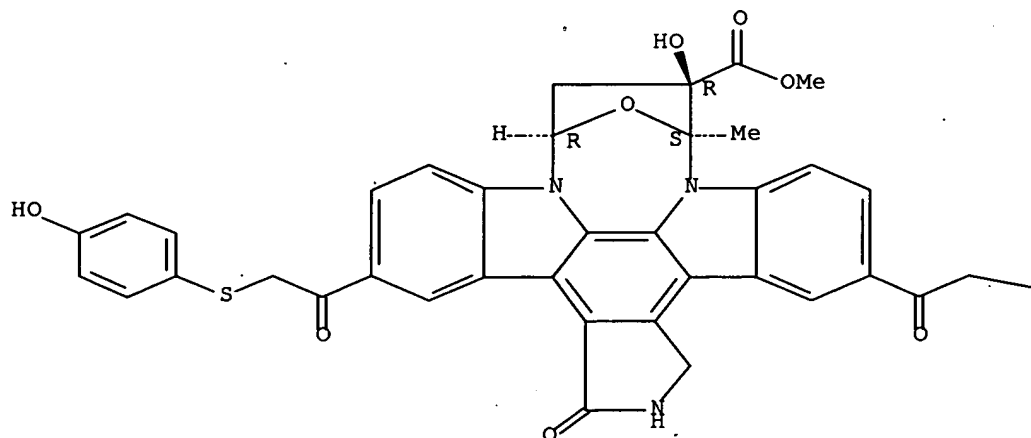


RN 200632-85-5 CAPLUS

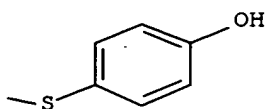
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis[[4-hydroxyphenyl]thio]acetyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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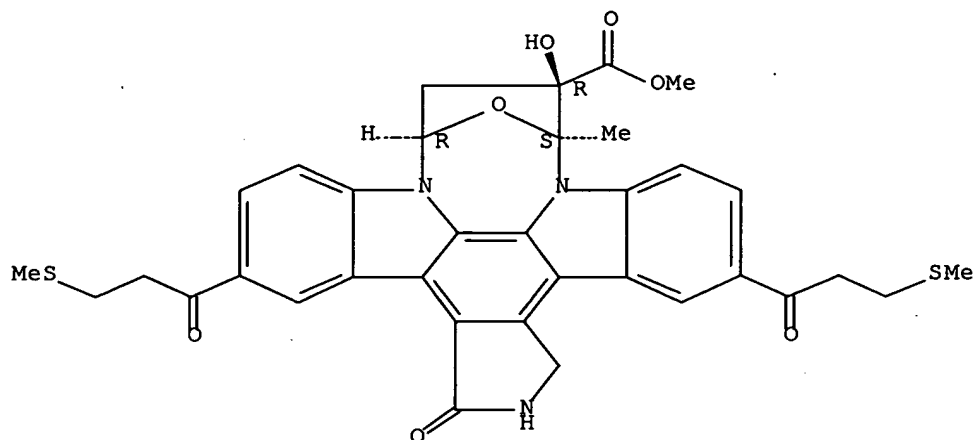


PAGE 1-B



RN 200632-88-8 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[3-(methylthio)-1-oxopropyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

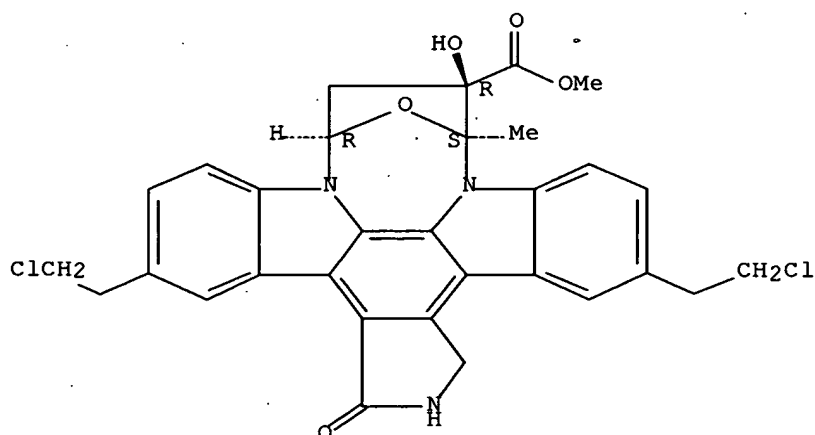
Absolute stereochemistry.



RN 200633-12-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis(2-chloroethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

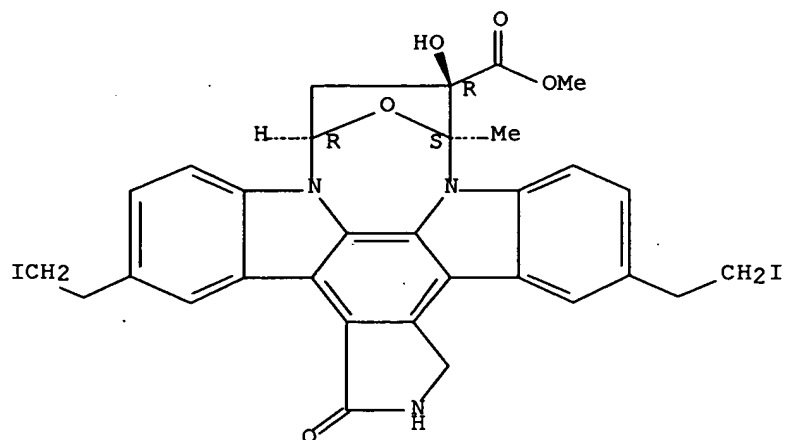
Absolute stereochemistry.



RN 200633-14-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(2-iodoethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

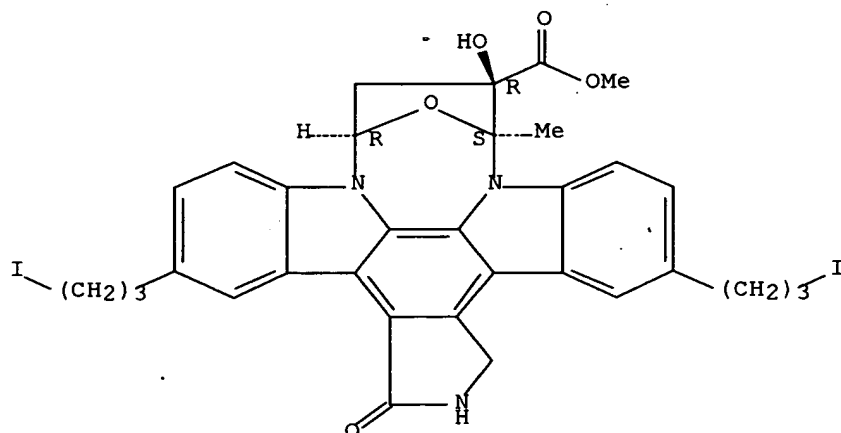
Absolute stereochemistry.



RN 200633-20-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(3-iodopropyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

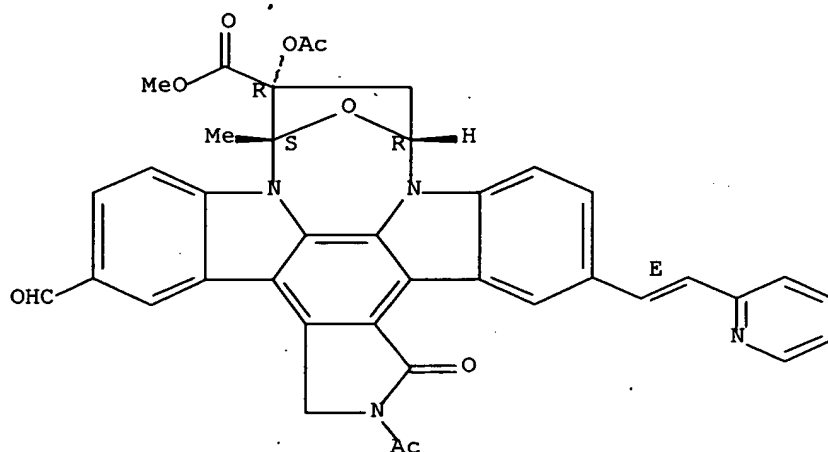


RN 200633-68-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-formyl-, 2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

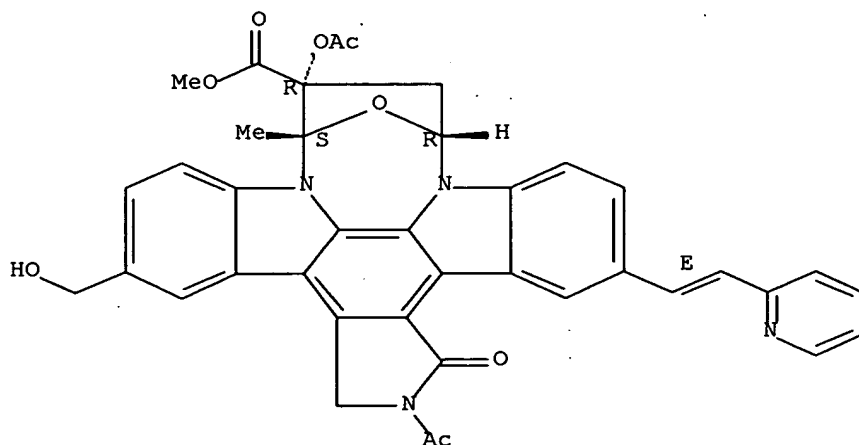


RN 200633-70-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5-(hydroxymethyl)-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

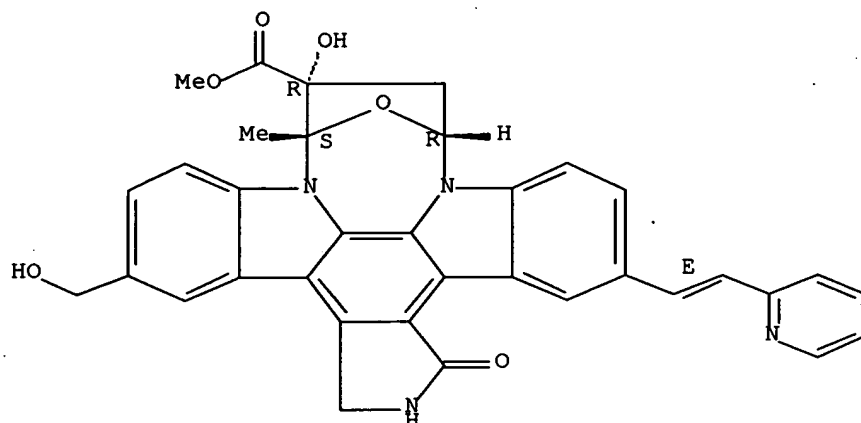


RN 200633-72-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

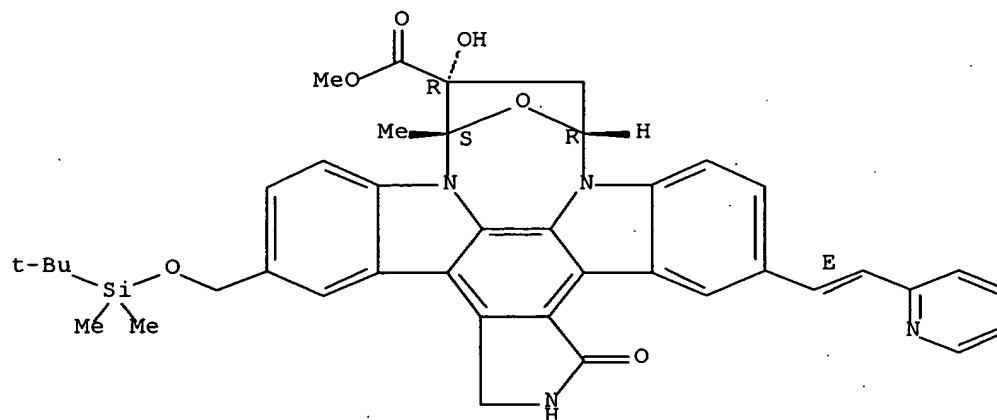


RN 200633-77-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

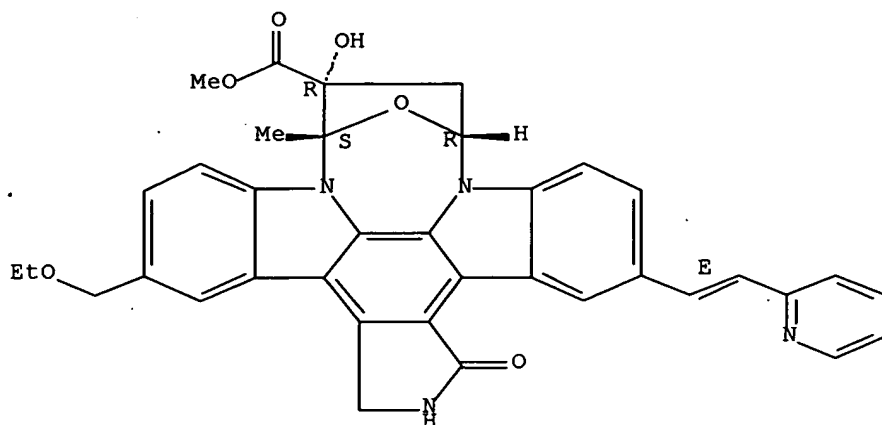


RN 200633-81-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

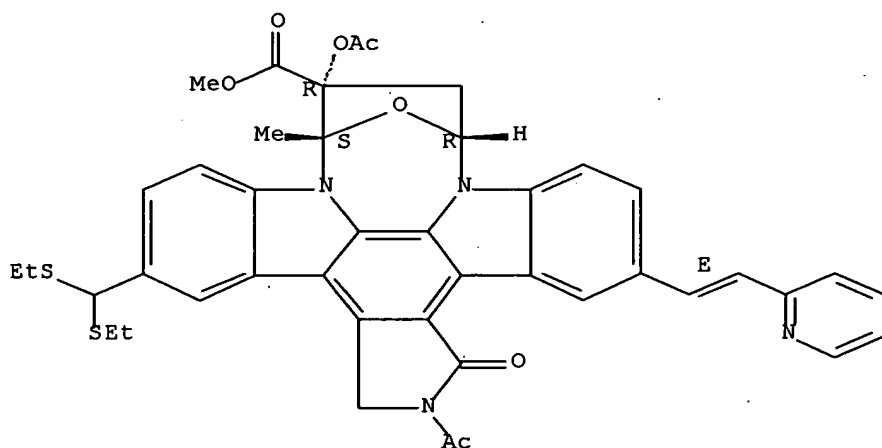
Absolute stereochemistry.

Double bond geometry as shown.



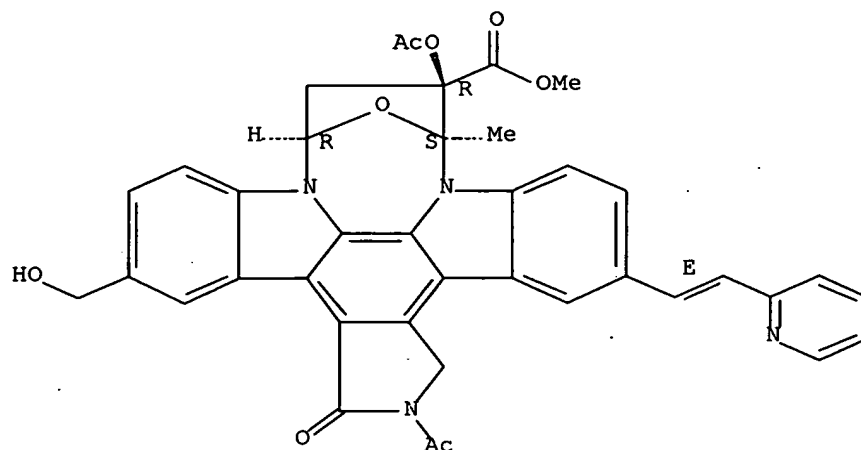
RN 200633-95-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-[bis(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



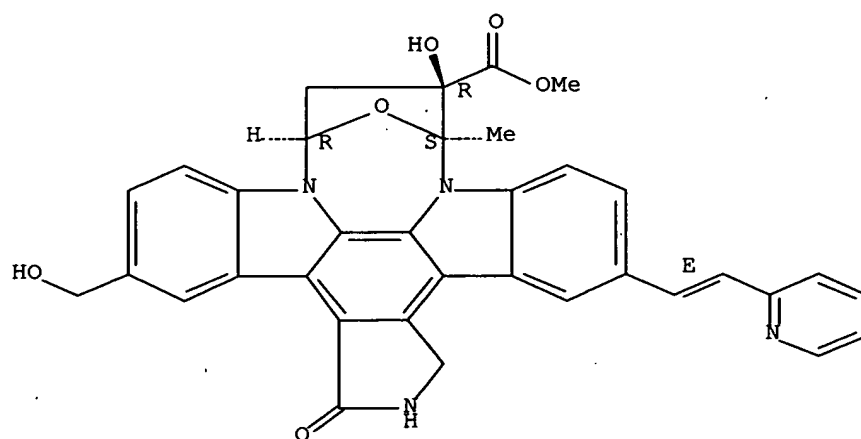
RN 200634-04-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-(hydroxymethyl)-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



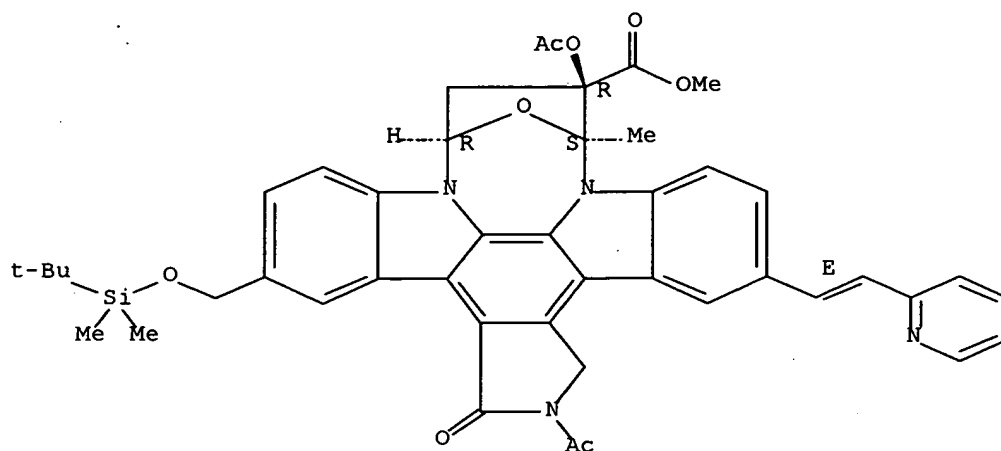
RN 200634-07-7 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-16-(hydroxymethyl)-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 200634-10-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

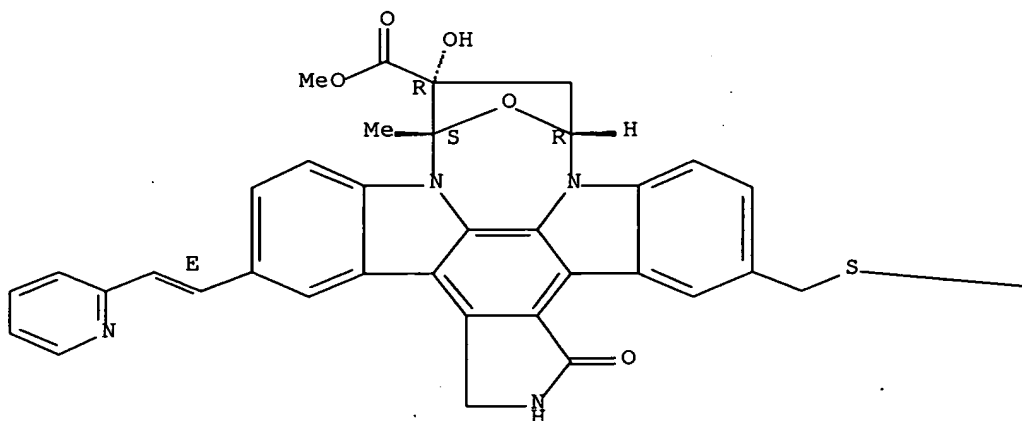


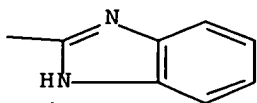
RN 200634-32-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(1H-benzimidazol-2-ylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

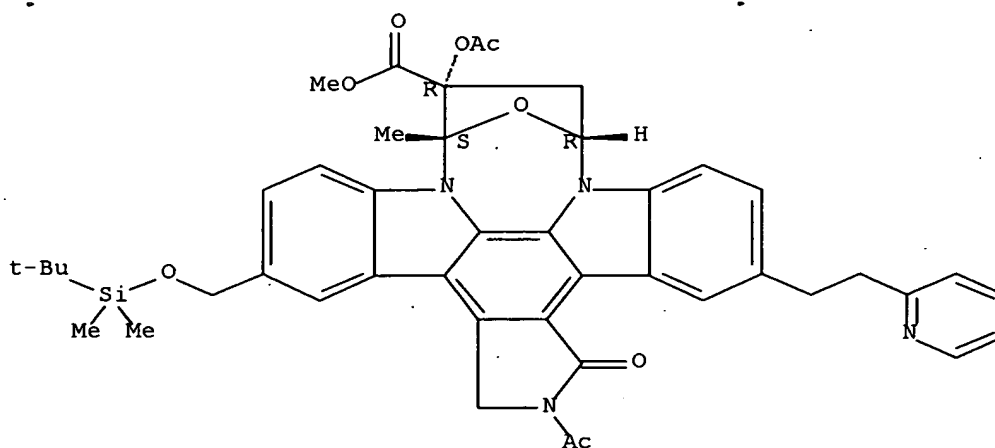
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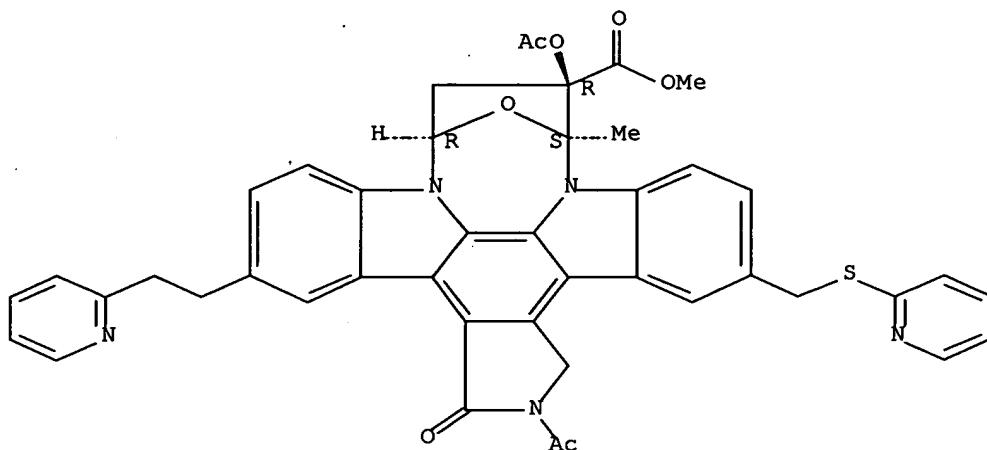
RN 200634-50-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)-(9CI)
 (CA INDEX NAME)

Absolute stereochemistry.



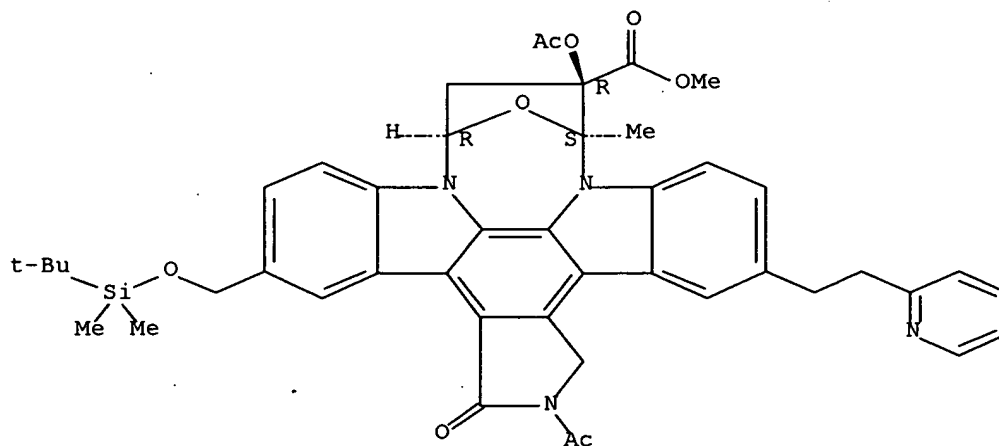
RN 200634-74-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[2-(2-pyridinyl)ethyl]-5-[(2-pyridinylthio)methyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



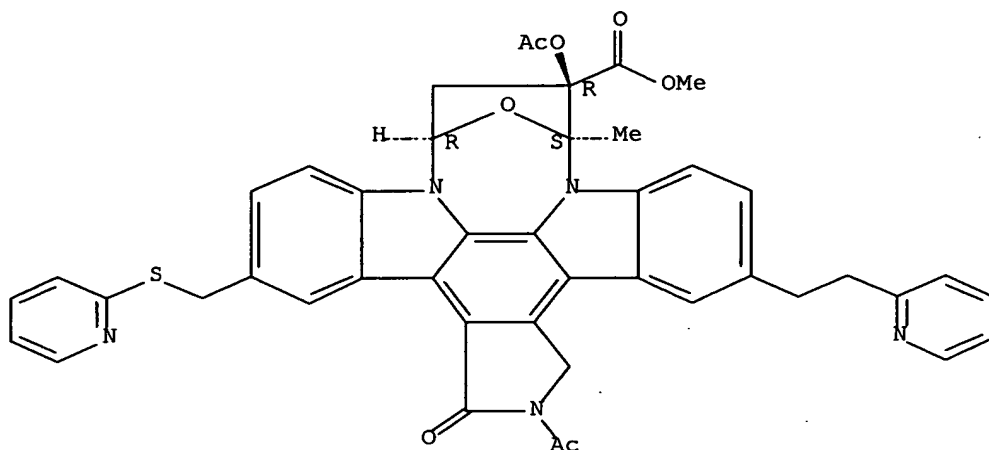
RN 200634-85-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)-(9CI)
 (CA INDEX NAME)

Absolute stereochemistry.



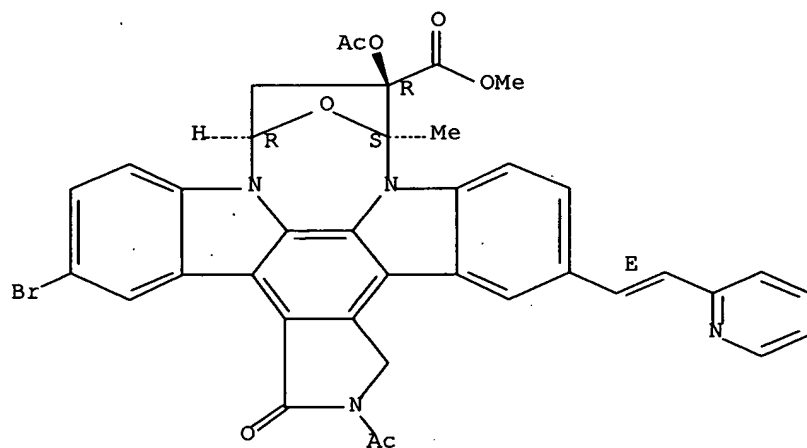
RN 200635-16-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-16-[(2-pyridinylthio)methyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



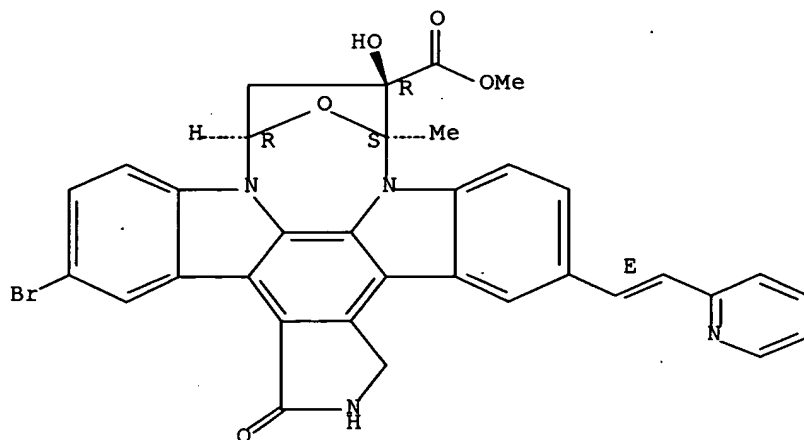
RN 200635-41-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-bromo-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 200635-46-7 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-bromo-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

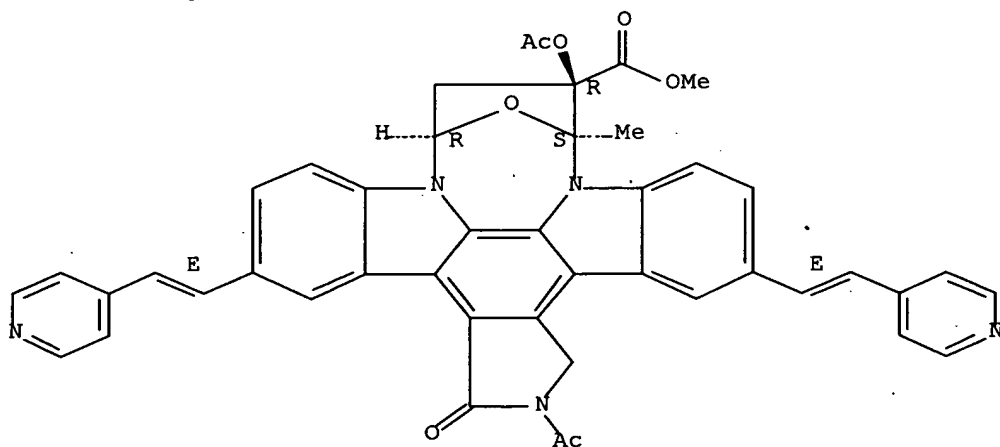


RN 200635-54-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5,16-bis[(1E)-2-(4-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

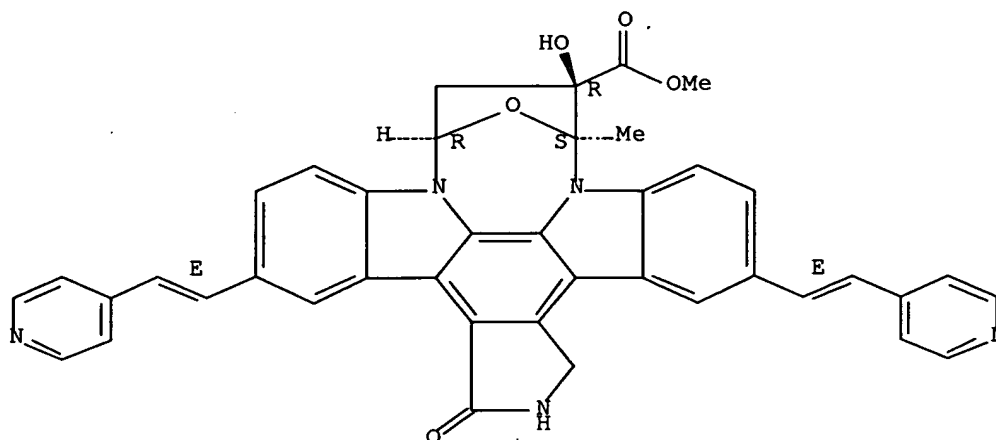


RN 200635-57-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(1E)-2-(4-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

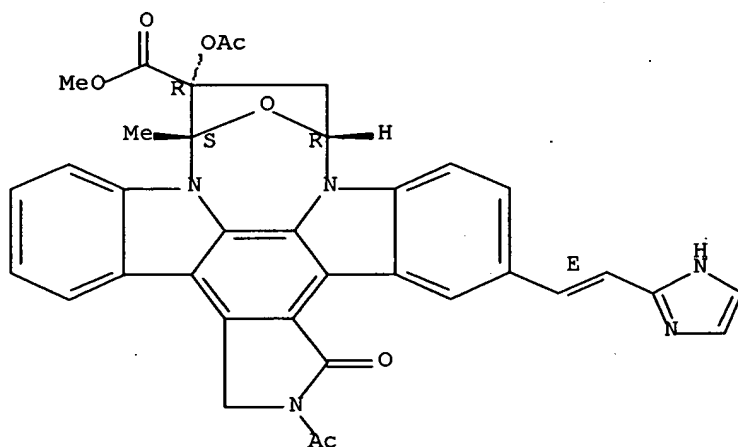
Double bond geometry as shown.



RN 200635-66-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-[(1E)-2-(1H-imidazol-2-yl)ethenyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

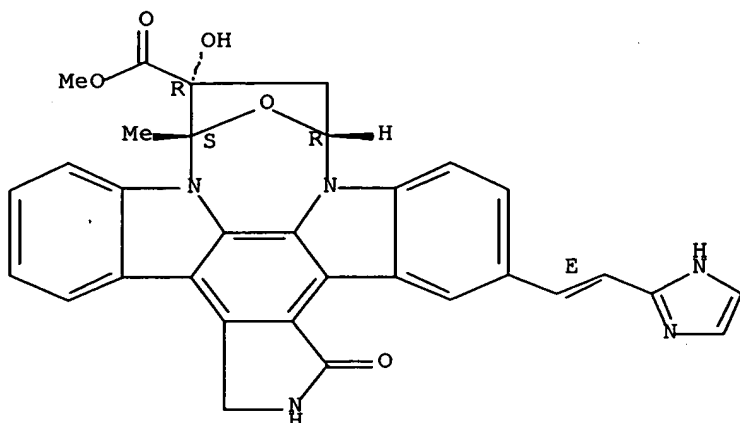
Absolute stereochemistry.
Double bond geometry as shown.



RN 200635-72-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-16-[(1E)-2-(1H-imidazol-2-yl)ethenyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

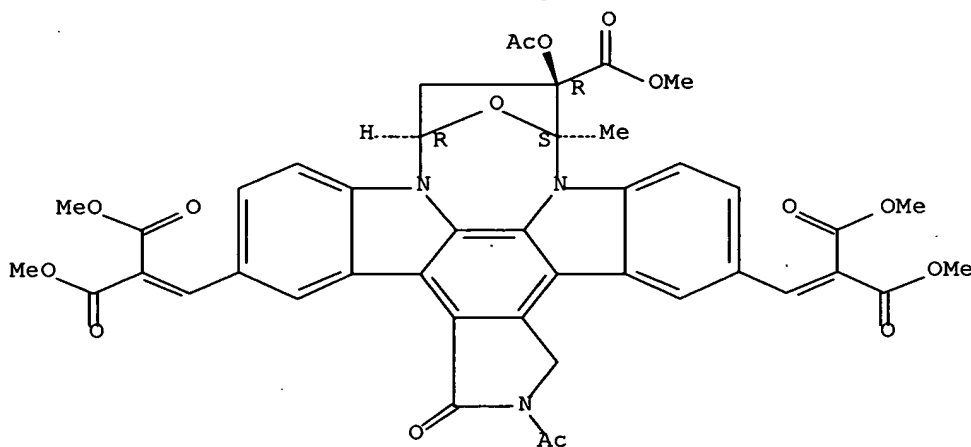
Absolute stereochemistry.
Double bond geometry as shown.



RN 200635-84-3 CAPLUS

CN Propanedioic acid, 2,2'-[[(9S,10R,12R)-2-acetyl-10-(acetyloxy)-
2,3,9,10,11,12-hexahydro-10-(methoxycarbonyl)-9-methyl-1-oxo-9,12-epoxy-
1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-5,16-
diyl]dimethyldiyne]bis-, tetramethyl ester (9CI) (CA INDEX NAME)

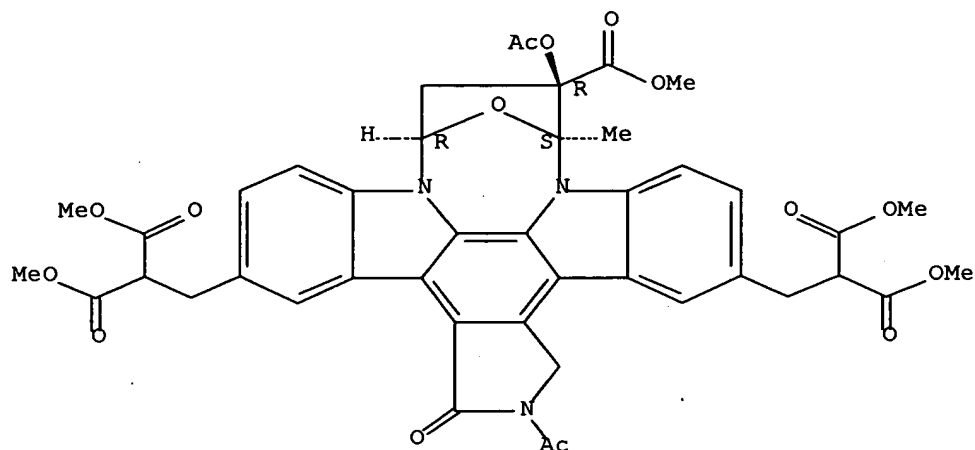
Absolute stereochemistry.



RN 200635-90-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
i][1,6]benzodiazocine-5,16-dipropanoic acid, 2-acetyl-10-(acetyloxy)-
2,3,9,10,11,12-hexahydro-.alpha.,.alpha.',10-tris(methoxycarbonyl)-9-
methyl-1-oxo-, dimethyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

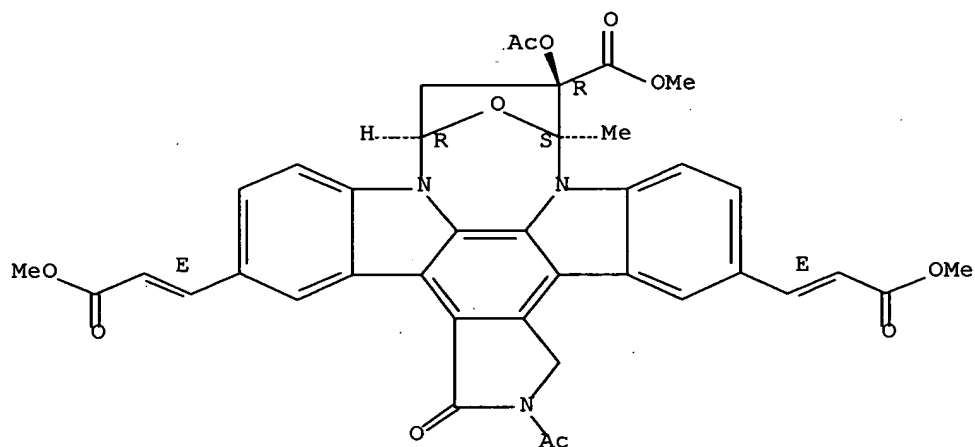


RN 200636-49-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5,16-bis[(1E)-3-methoxy-3-oxo-1-propenyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

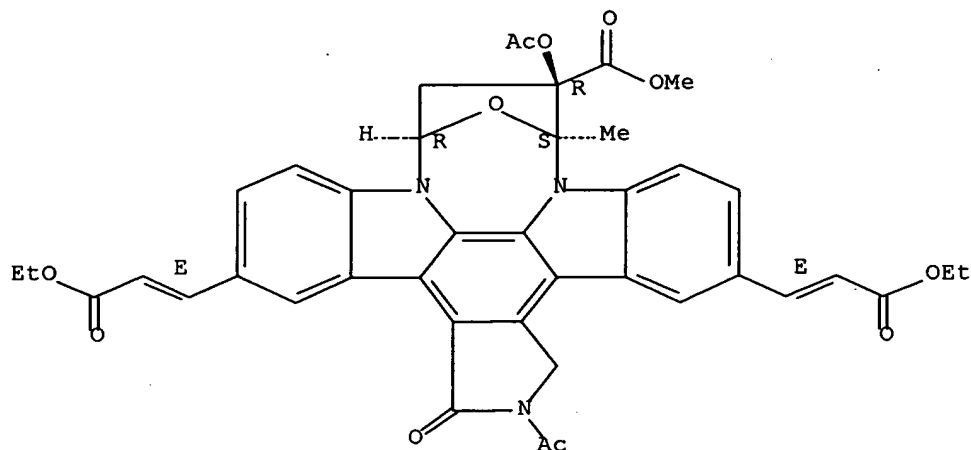


RN 200636-53-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis[(1E)-3-ethoxy-3-oxo-1-propenyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

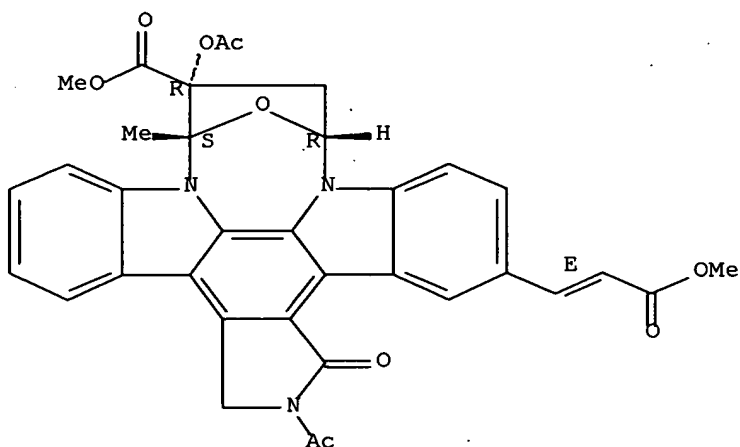
Absolute stereochemistry.

Double bond geometry as shown.



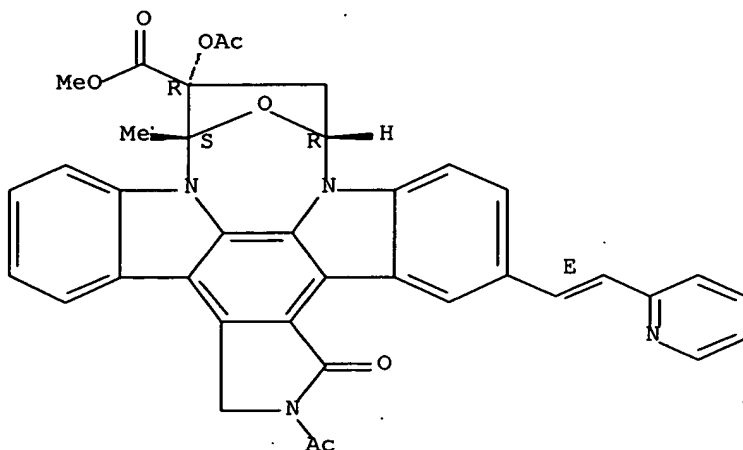
RN 200636-57-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-[(1E)-3-methoxy-3-oxo-1-propenyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



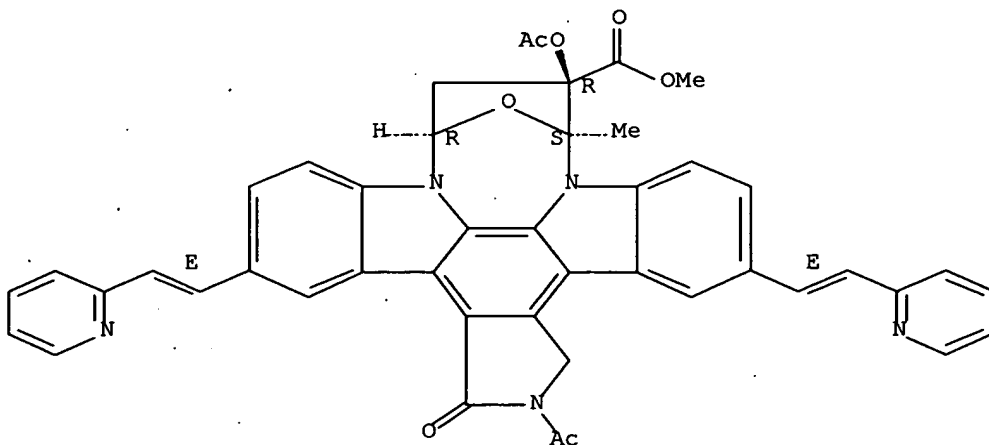
RN 200636-65-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



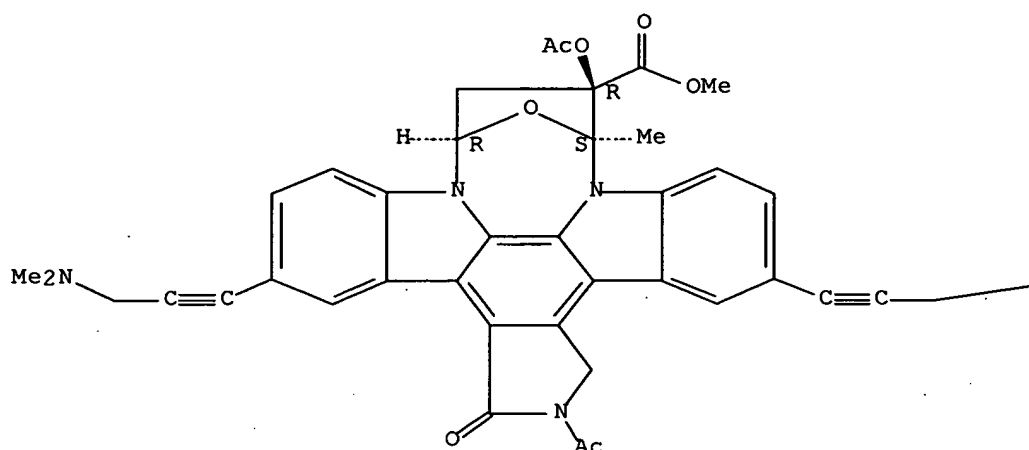
RN 200636-68-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5,16-bis[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 200636-72-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-[(1E)-3-ethoxy-3-oxo-1-propenyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

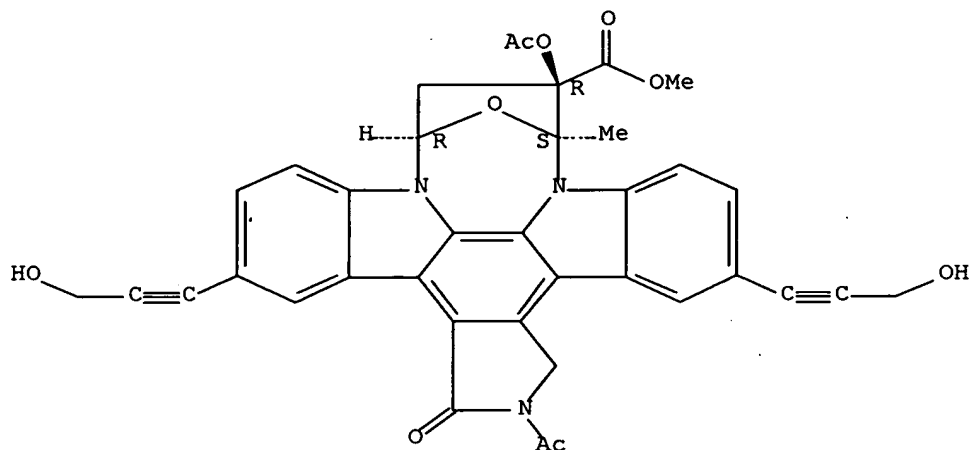
Absolute stereochemistry.
 Double bond geometry as shown.



—NMe₂

RN 200636-83-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5,16-bis(3-hydroxy-1-propynyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

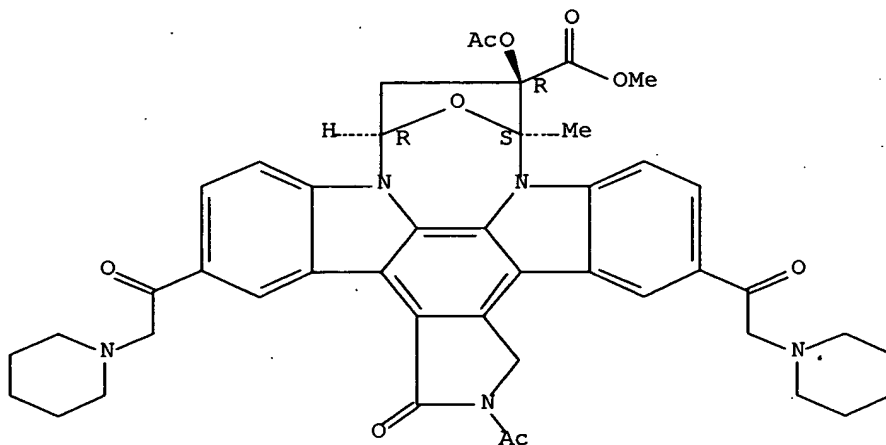
Absolute stereochemistry.



RN 200636-85-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5,16-bis[(1-piperidinyl)acetyl]-methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

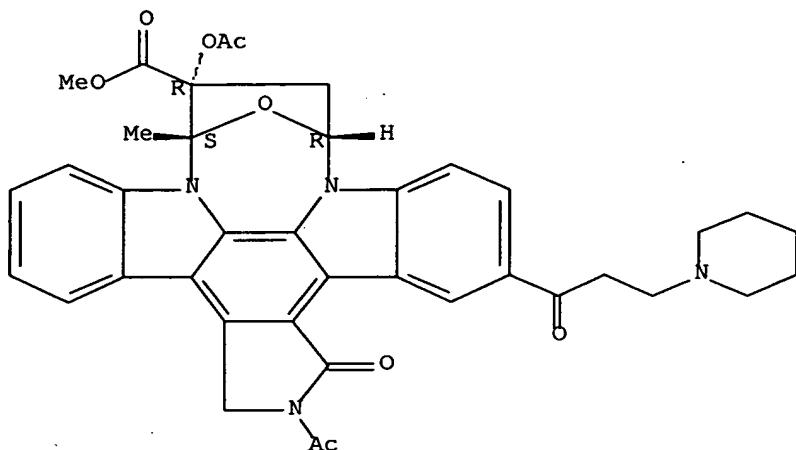
Absolute stereochemistry.



RN 200636-88-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[1-oxo-3-(1-piperidinyl)propyl]-methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

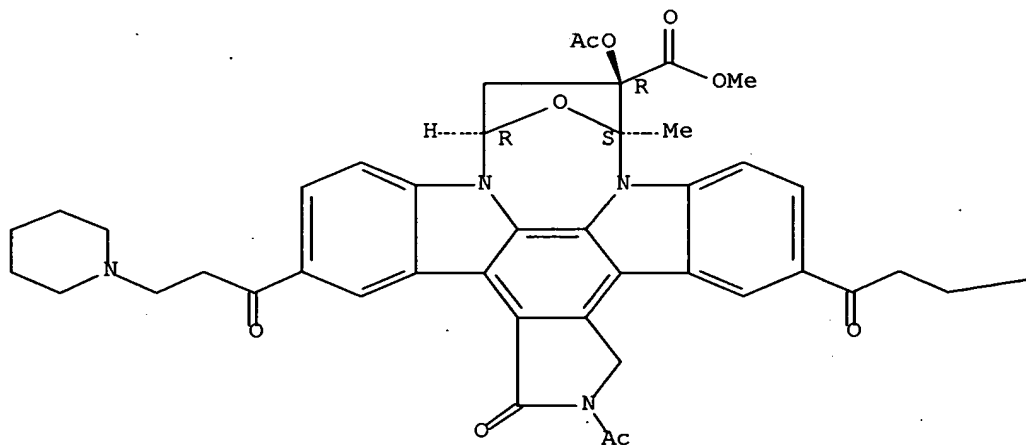
Absolute stereochemistry.

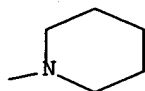


RN 200636-90-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5,16-bis[1-oxo-3-(1-piperidinyl)propyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

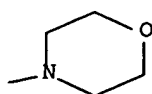
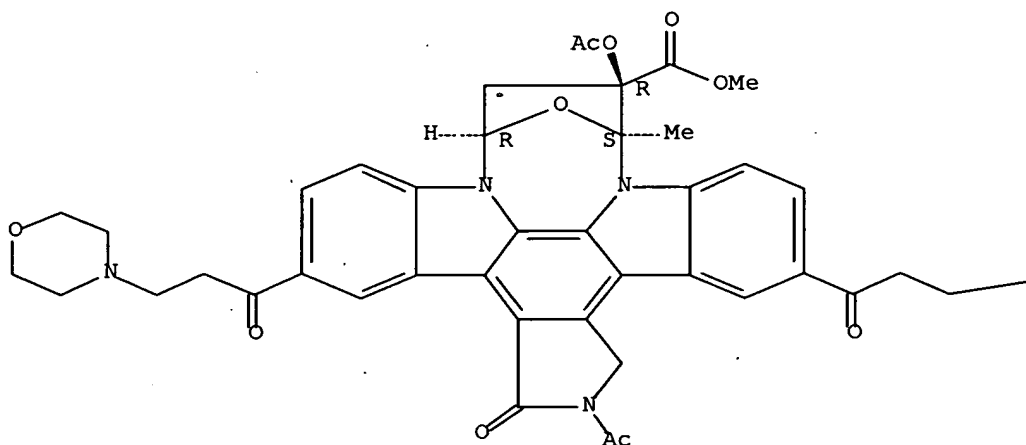
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RN 200636-92-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-5,16-bis[3-(4-morpholinyl)-1-oxopropyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

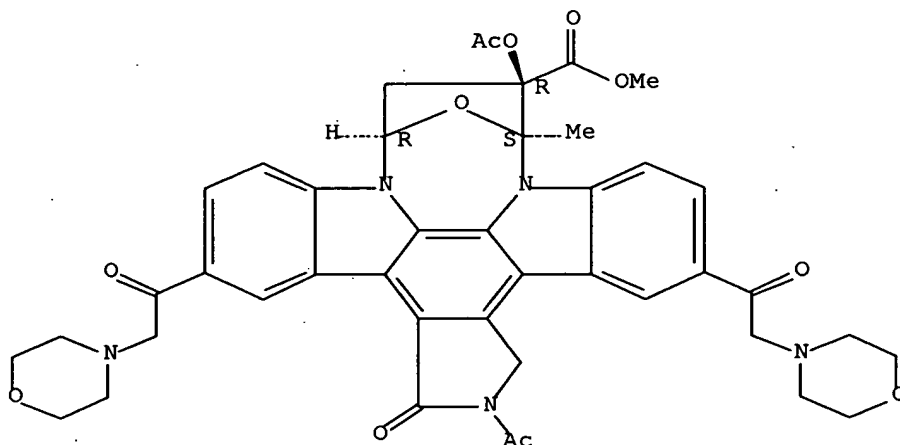
Absolute stereochemistry.



RN 200636-95-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-5,16-bis(4-morpholinylacetyl)-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

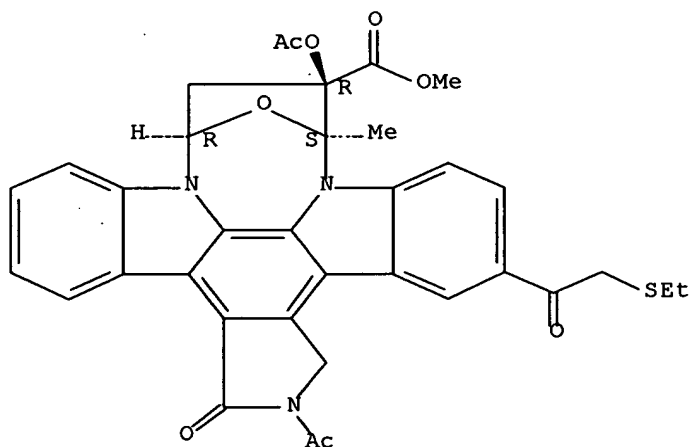
Absolute stereochemistry.



RN 200636-98-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-[(ethylthio)acetyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

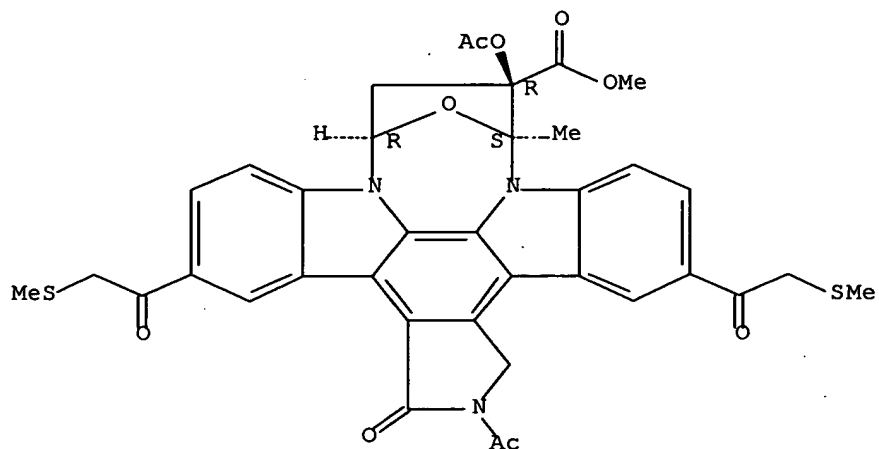
Absolute stereochemistry.



RN 200637-01-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-5,16-bis[(methylthio)acetyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

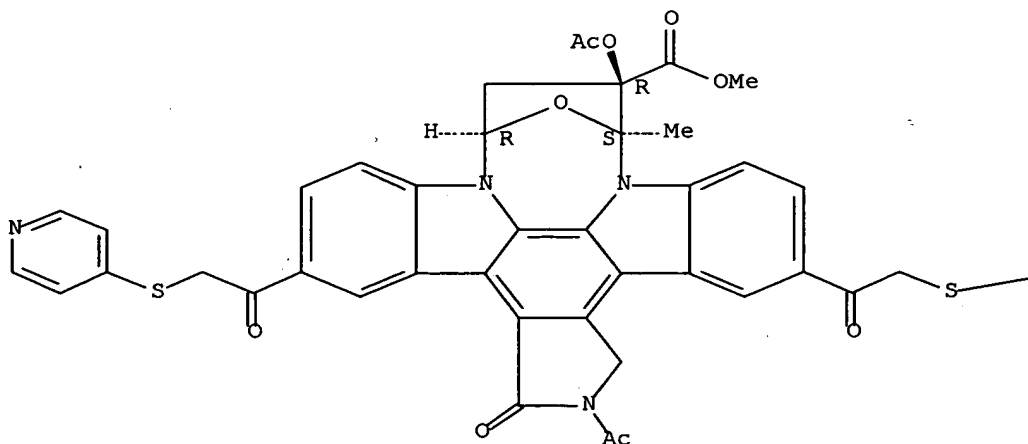
Absolute stereochemistry.

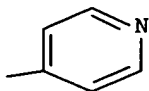


RN 200637-05-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5,16-bis[(4-pyridinylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

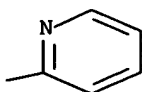
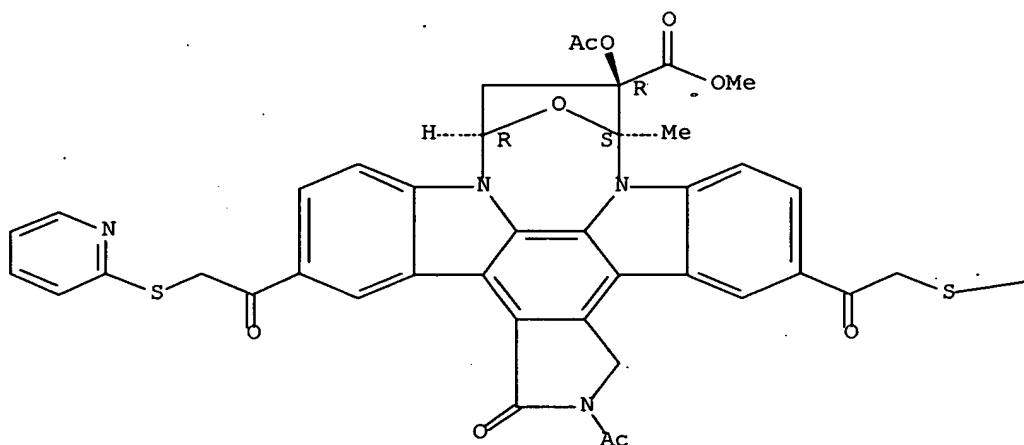
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RN 200637-06-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5,16-bis[(2-pyridinylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

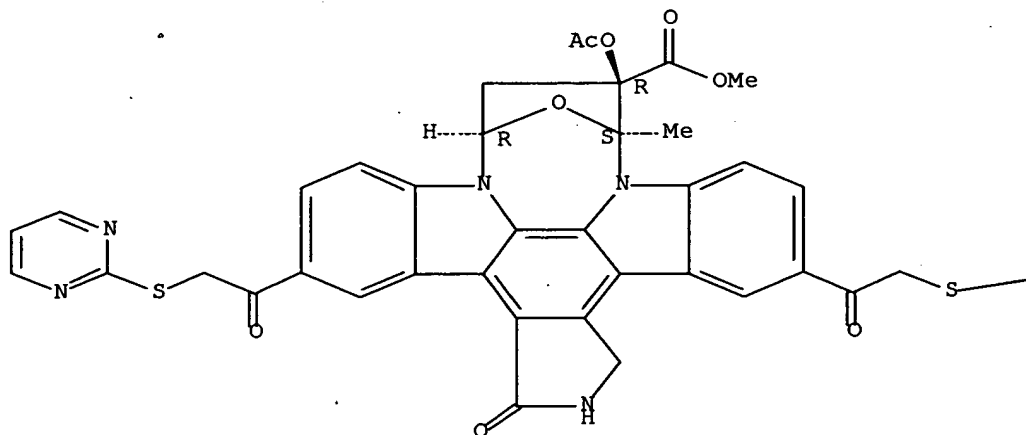


RN 200637-07-6 CAPLUS

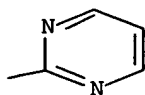
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5,16-bis[(2-pyrimidinylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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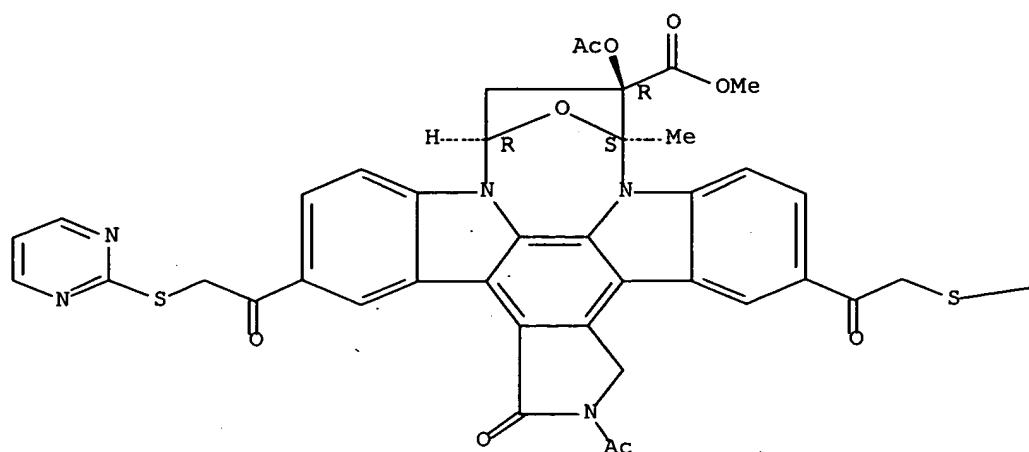


RN 200637-08-7 CAPLUS

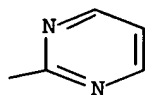
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5,16-bis[(2-pyrimidinylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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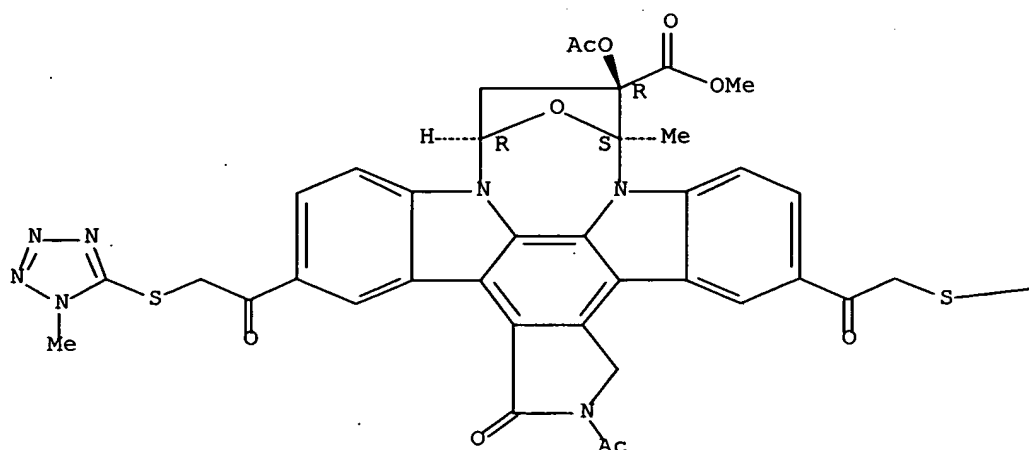
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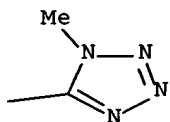
RN 200637-09-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-5,16-bis[[(1-methyl-1H-tetrazol-5-yl)thio]acetyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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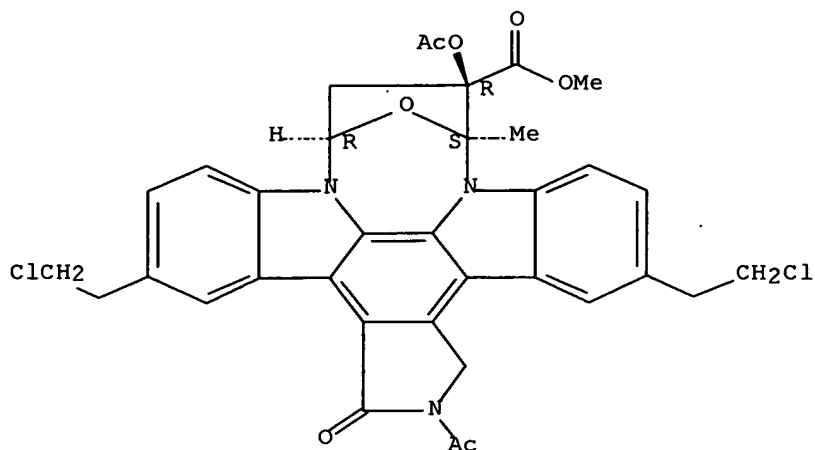


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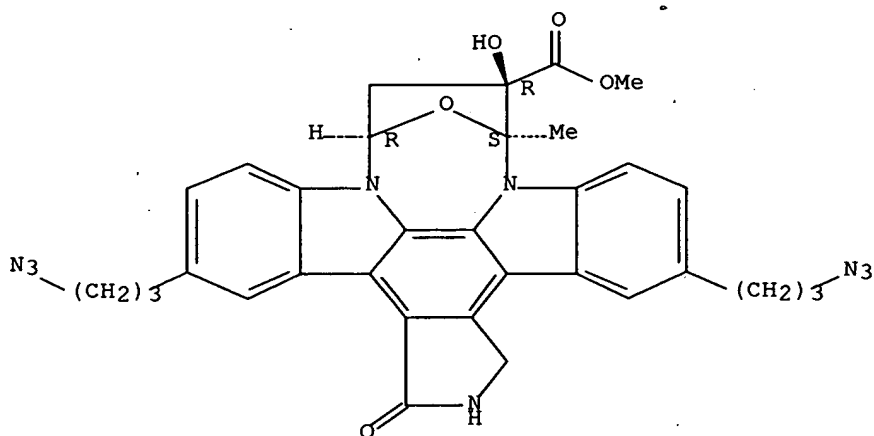
RN 200637-13-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis(2-chloroethyl)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



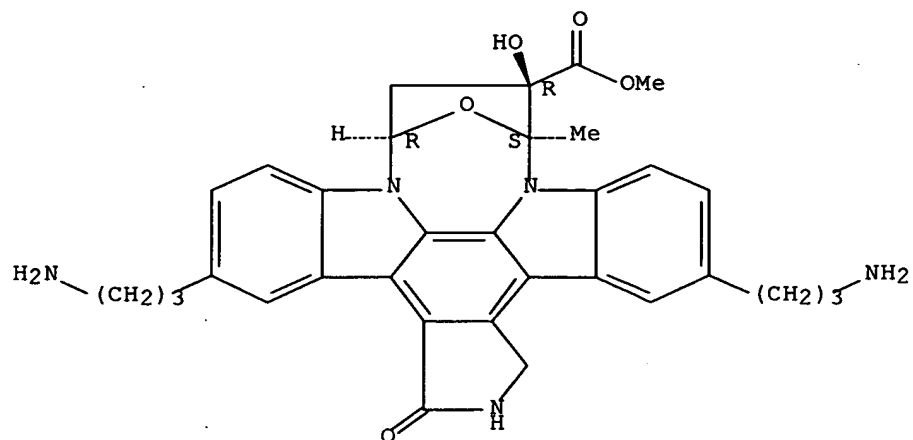
RN 200637-15-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis(3-azidopropyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200637-17-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis(3-aminopropyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

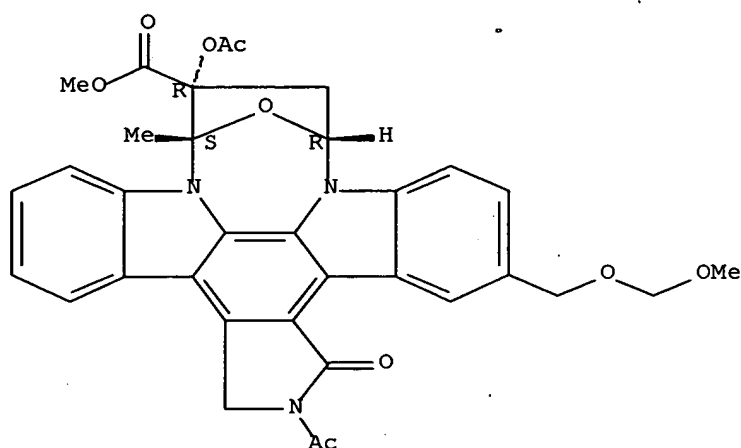
Absolute stereochemistry.



RN 200637-22-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-[(methoxymethoxy)methyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

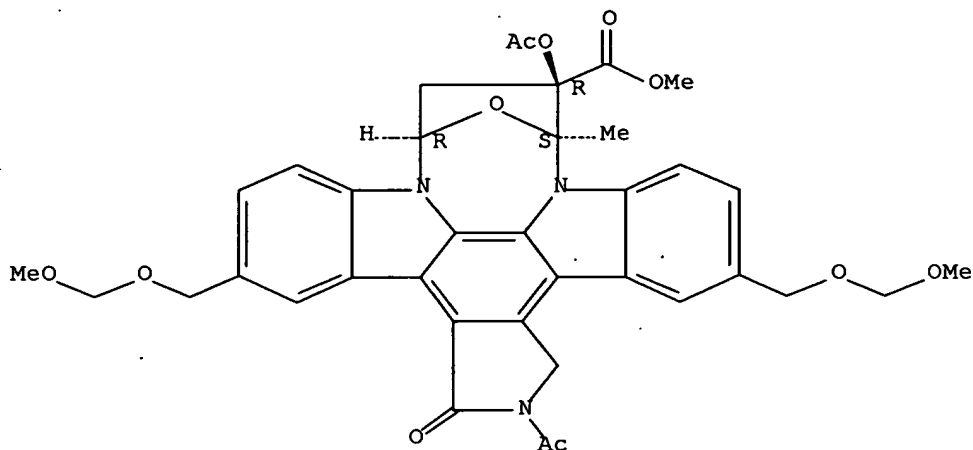
Absolute stereochemistry.



RN 200637-23-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5,16-bis[(methoxymethoxy)methyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

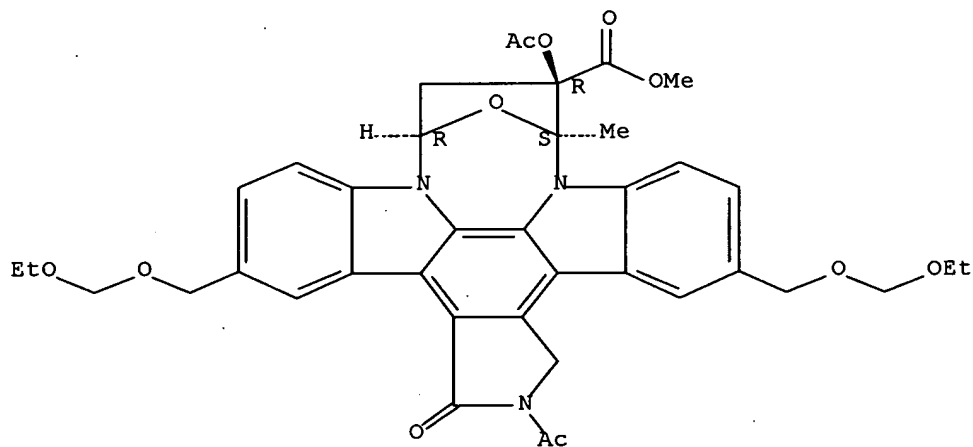
Absolute stereochemistry.



RN 200637-25-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis[(ethoxymethoxy)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

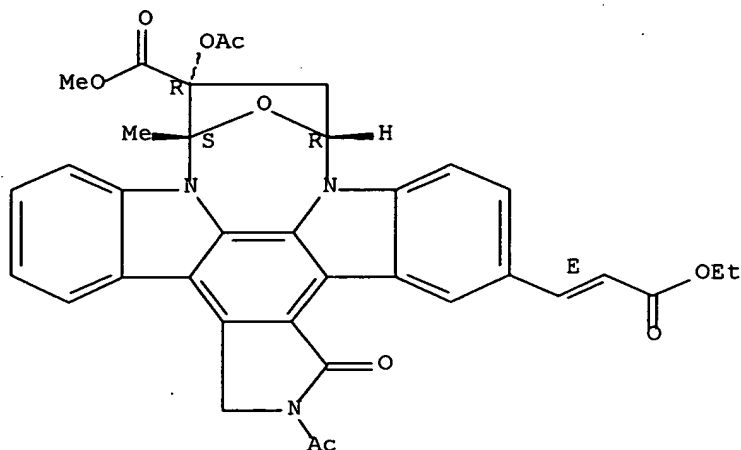


RN 200637-35-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-[(1E)-3-ethoxy-3-oxo-1-propenyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

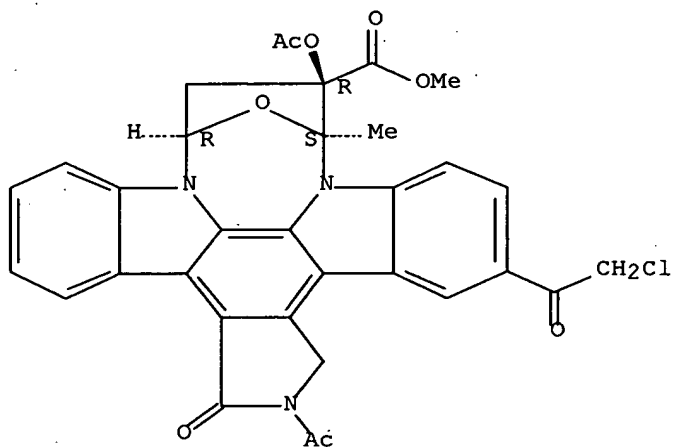
Double bond geometry as shown.



RN 200637-36-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-(chloroacetyl)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

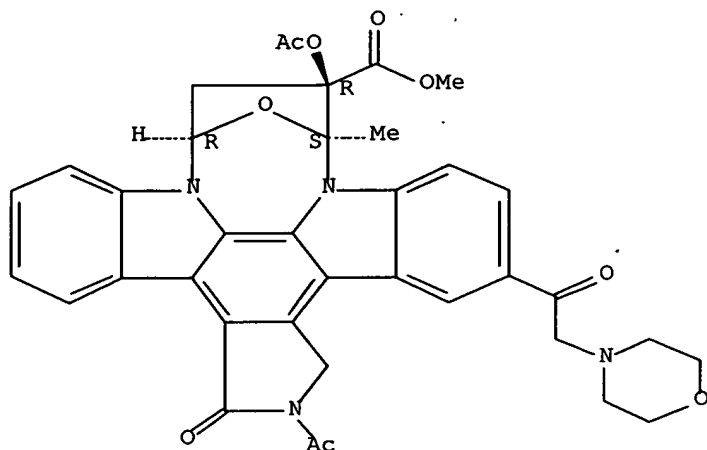
Absolute stereochemistry.



RN 200637-37-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-5-(4-morpholinylacetyl)-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

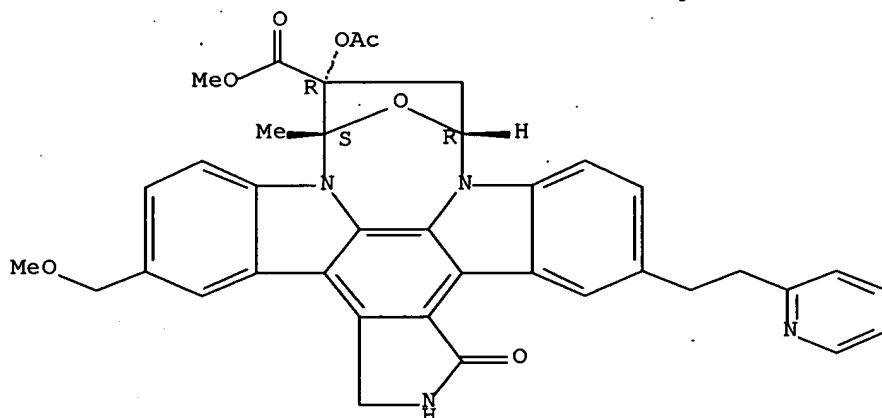
Absolute stereochemistry.



RN 200637-43-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5-(methoxymethyl)-9-methyl-1-oxo-16-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

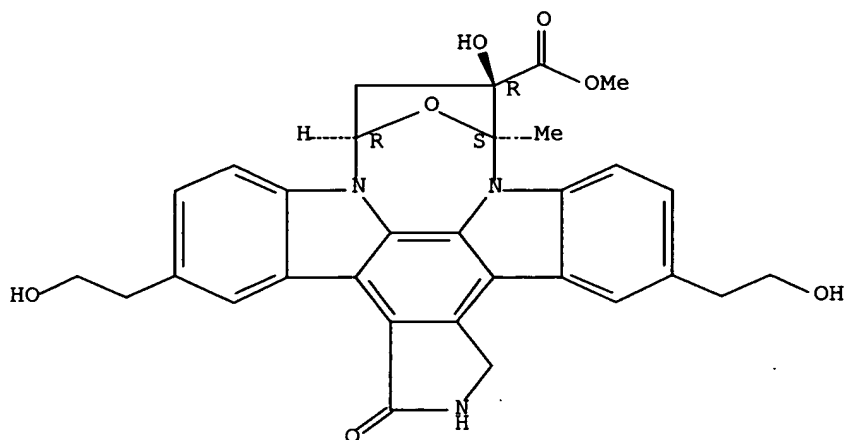
Absolute stereochemistry.



RN 200637-49-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(2-hydroxyethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

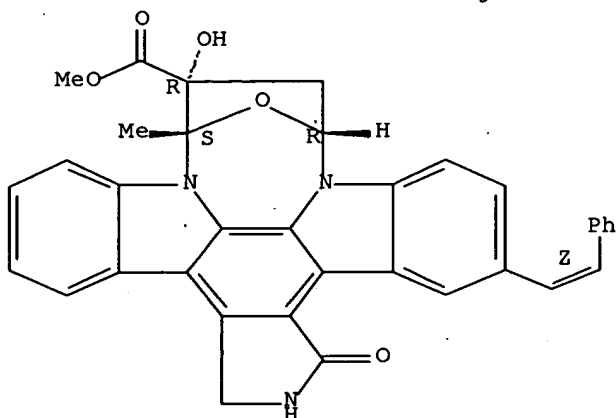


RN 367527-02-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1Z)-2-phenylethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

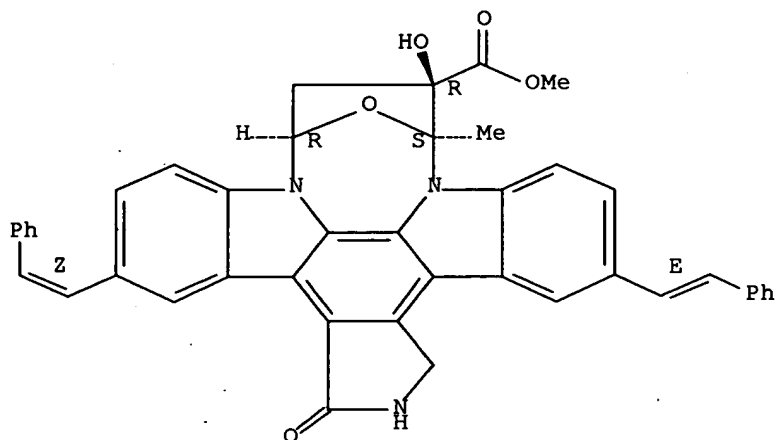


RN 367527-03-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(1E)-2-phenylethenyl]-16-[(1Z)-2-phenylethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

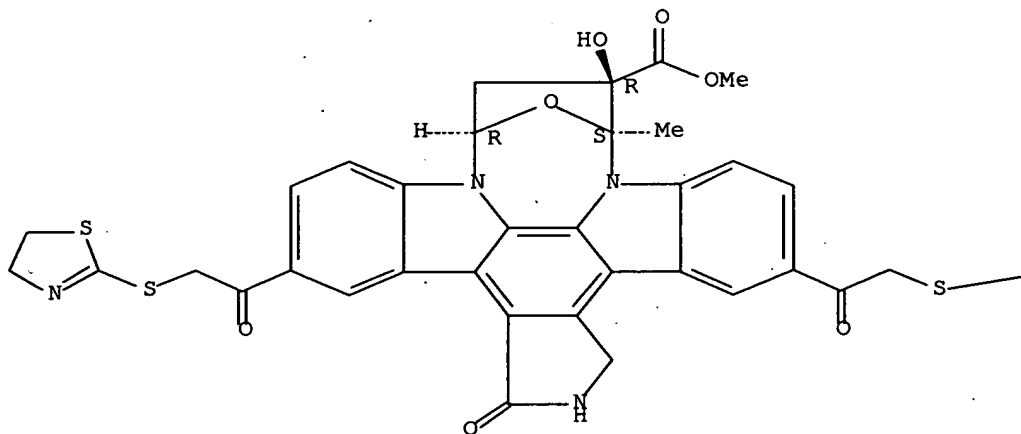


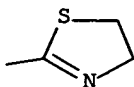
RN 367527-06-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[[4,5-dihydro-2-thiazolyl)thio]acetyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

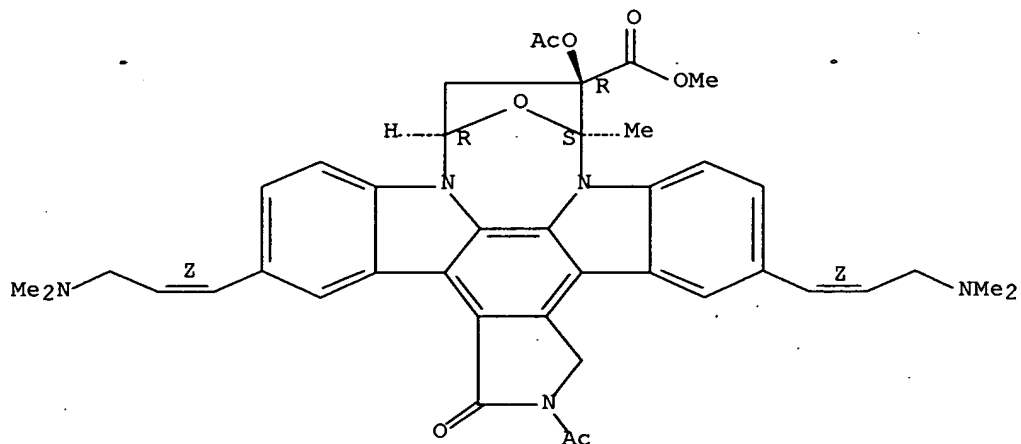
PAGE 1-A





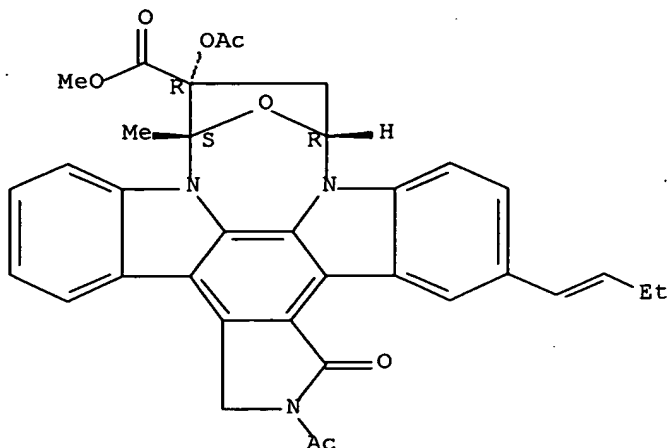
RN 367527-12-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis[(1Z)-3-(dimethylamino)-1-propenyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 367527-14-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-(1-butenyl)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.

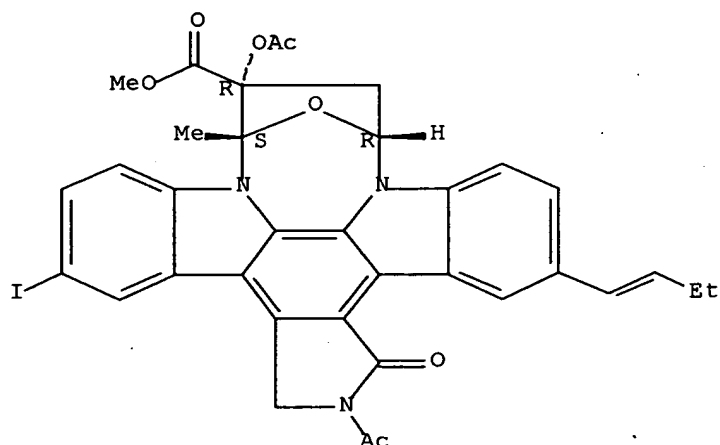


RN 367527-16-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-(1-butenyl)-2,3,9,10,11,12-hexahydro-5-iodo-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

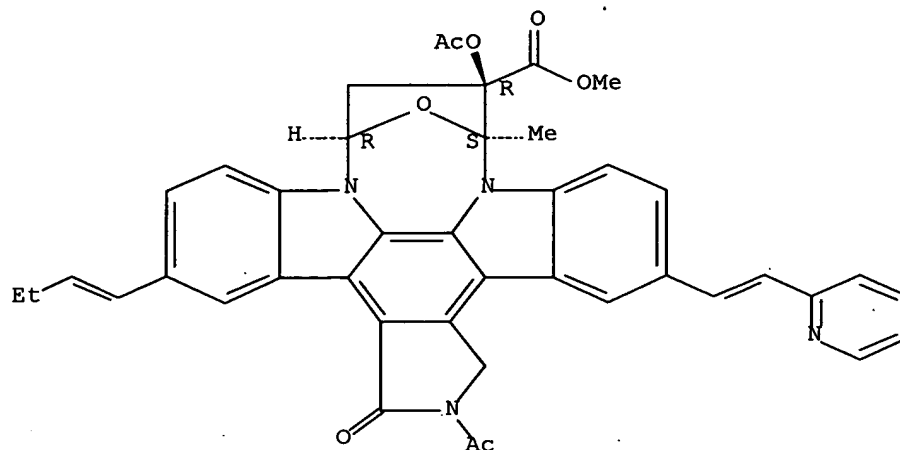


RN 367527-42-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-(1-butenyl)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

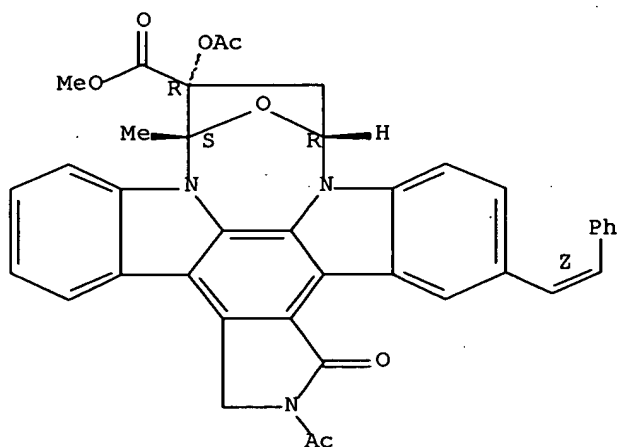
Absolute stereochemistry.

Double bond geometry unknown.



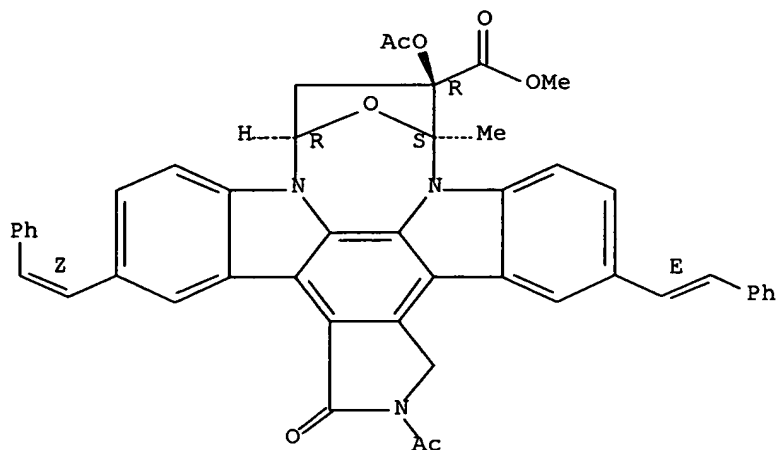
RN 367527-46-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(1Z)-2-phenylethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown. .



RN 367527-47-7 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5-[(1E)-2-phenylethenyl]-16-[(1Z)-2-phenylethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

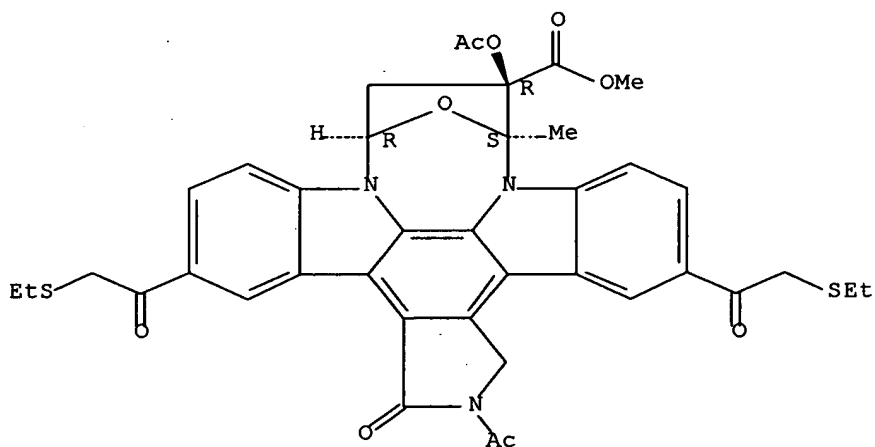
Absolute stereochemistry.
 Double bond geometry as shown.



RN 367527-48-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis[(ethylthio)acetyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

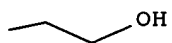
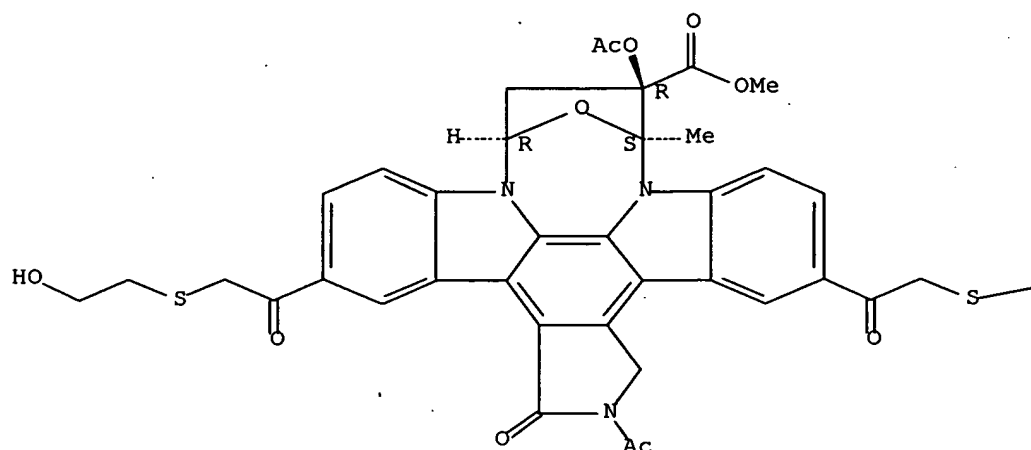
Absolute stereochemistry.



RN 367527-49-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5,16-bis[[(2-hydroxyethyl)thio]acetyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 200632-37-7P 200632-39-9P 200632-42-4P
 200632-44-6P 200632-45-7P 200632-46-8P
 200632-47-9P 200632-49-1P 200632-51-5P
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 200633-18-7P 200633-22-3P 200633-24-5P
 200633-26-7P 200633-28-9P 200633-30-3P
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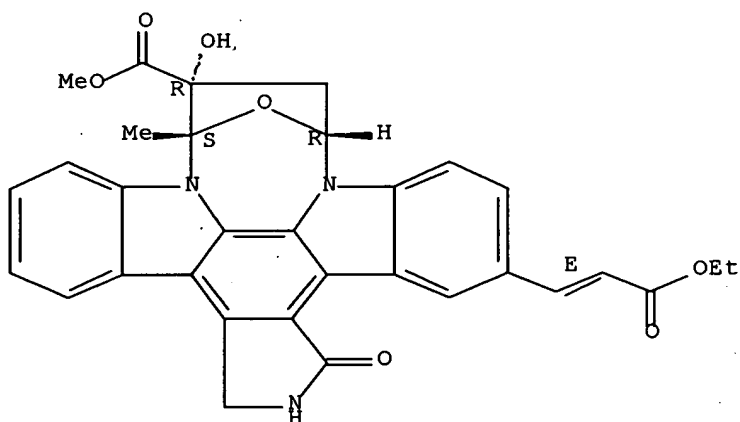
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 200635-78-5P 200635-96-7P 200636-00-6P
 200636-03-9P 200636-09-5P 200636-14-2P
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 367527-13-7P 367527-15-9P 367527-17-1P
 367527-31-9P 367527-32-0P 367527-33-1P
 367527-35-3P

RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological
 study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
 use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of derivs. of the alkaloid K-252a for pharmaceutical use in
 the
 treatment of neurol. disorders)

RN 200632-37-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
 i][1,6]benzodiazocine-10-carboxylic acid, 16-[(1E)-3-ethoxy-3-oxo-1-
 propenyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl
 ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

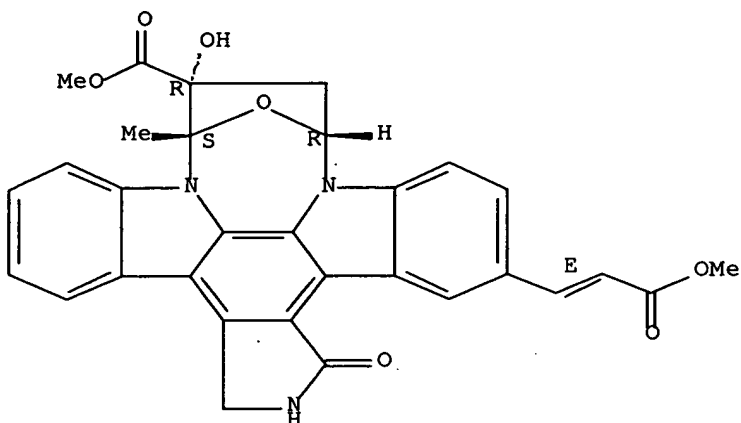
Absolute stereochemistry.
 Double bond geometry as shown.



RN 200632-39-9 CAPLUS

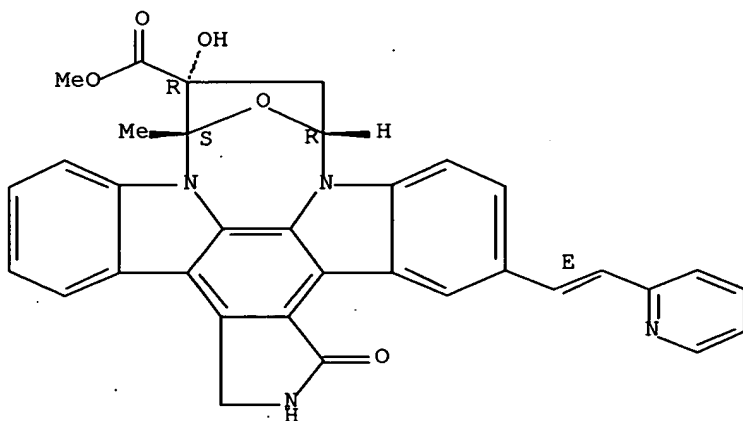
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
 i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-
 hydroxy-16-[(1E)-3-methoxy-3-oxo-1-propenyl]-9-methyl-1-oxo-, methyl
 ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



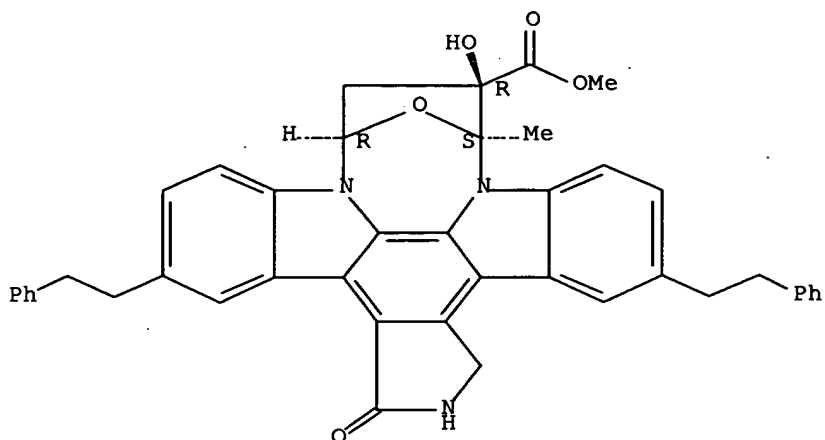
RN 200632-42-4 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 200632-44-6 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis(2-phenylethyl)-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

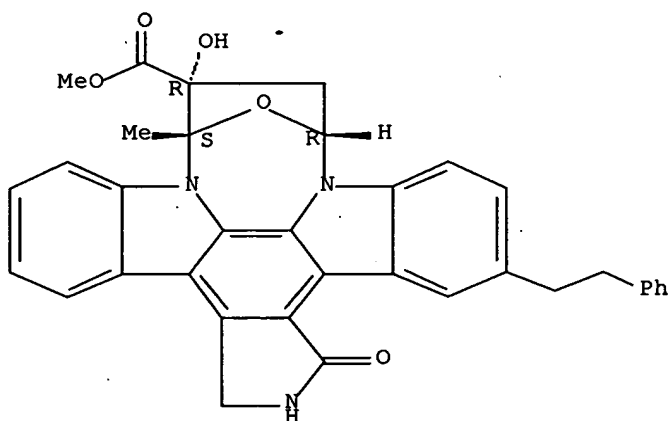
Absolute stereochemistry.



RN 200632-45-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-(2-phenylethyl)-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

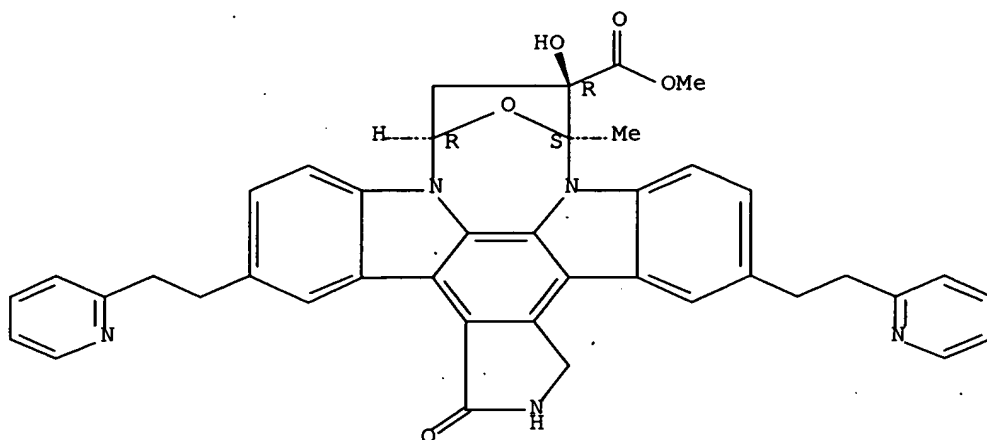
Absolute stereochemistry.



RN 200632-46-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

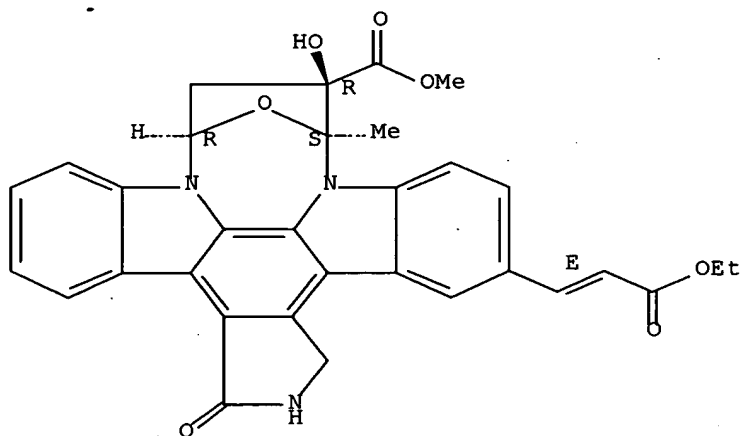


RN 200632-47-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[(1E)-3-ethoxy-3-oxo-1-propenyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

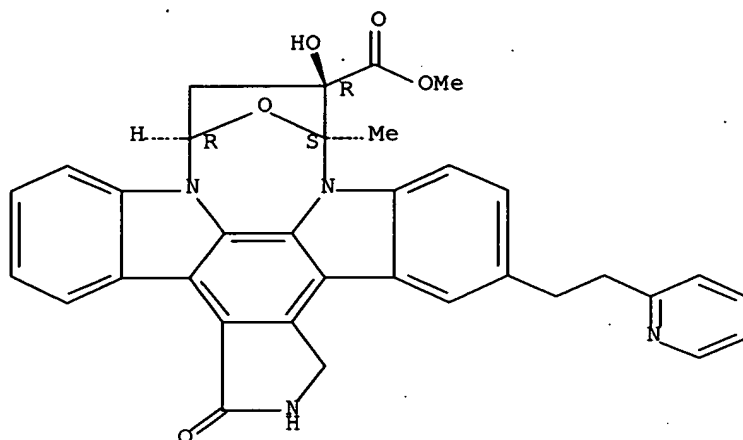
Double bond geometry as shown.



RN 200632-49-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

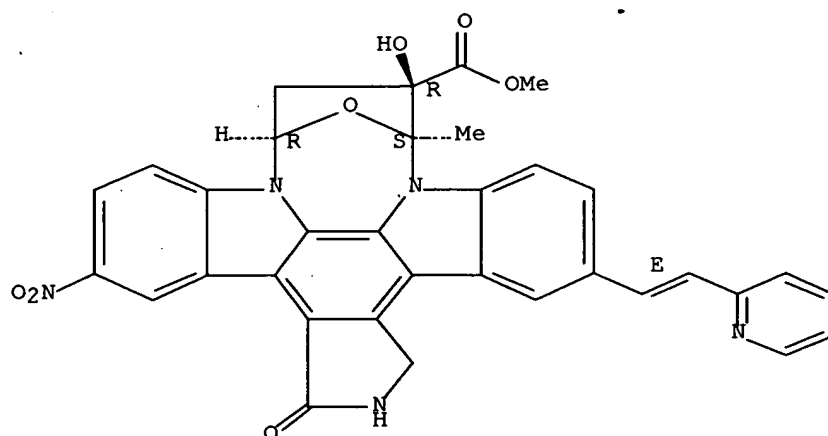


RN 200632-51-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-16-nitro-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

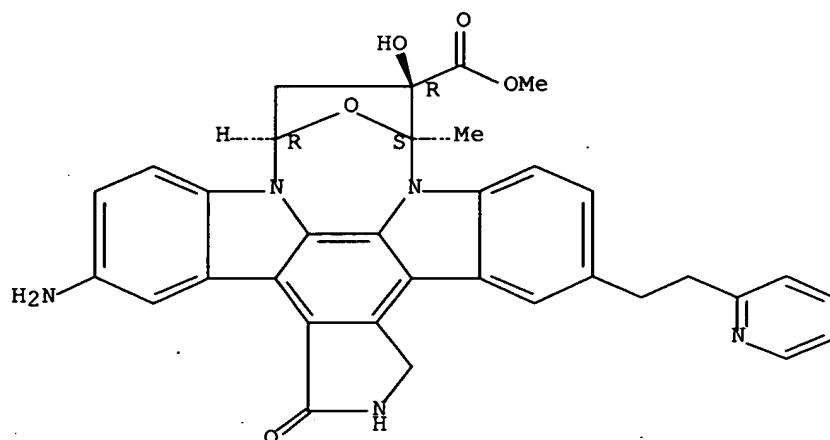
Double bond geometry as shown.



RN 200632-53-7 CAPLUS

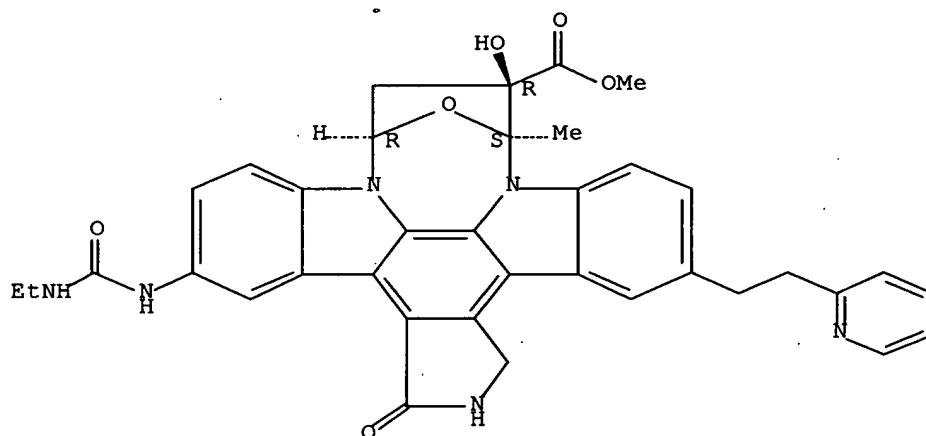
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-amino-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



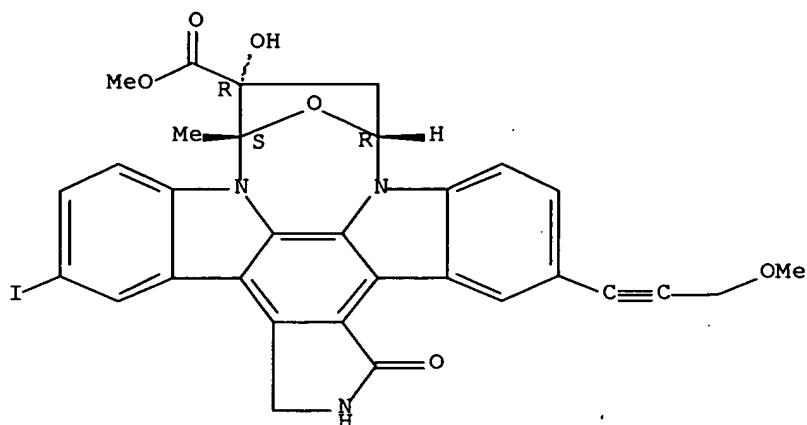
RN 200632-54-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[(ethylamino) carbonyl] amino]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200632-56-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-5-iodo-10-hydroxy-16-(3-methoxy-1-propynyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

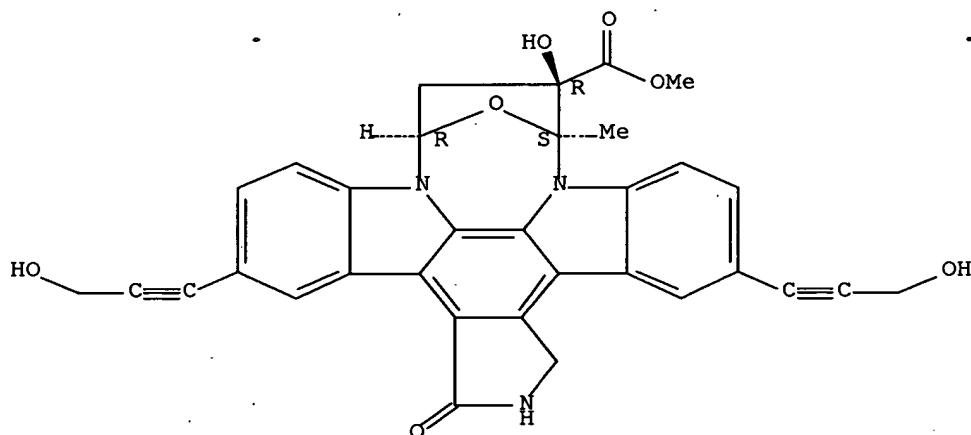
Absolute stereochemistry.



RN 200632-58-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(3-hydroxy-1-propynyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

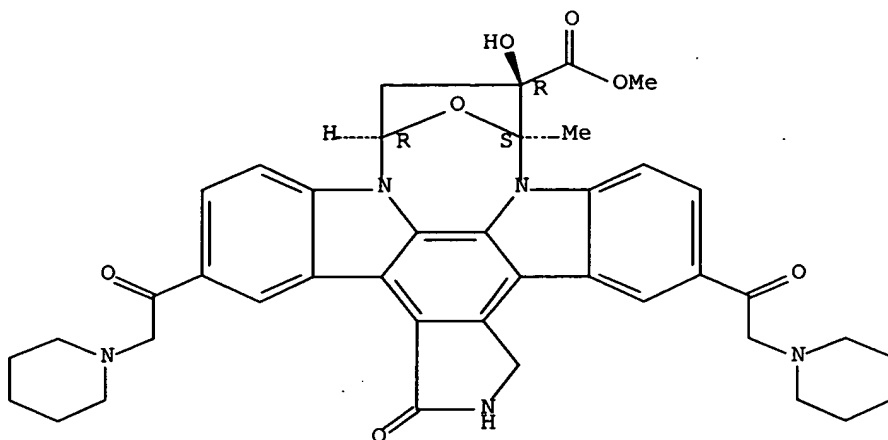
Absolute stereochemistry.



RN 200632-60-6 CAPLUS

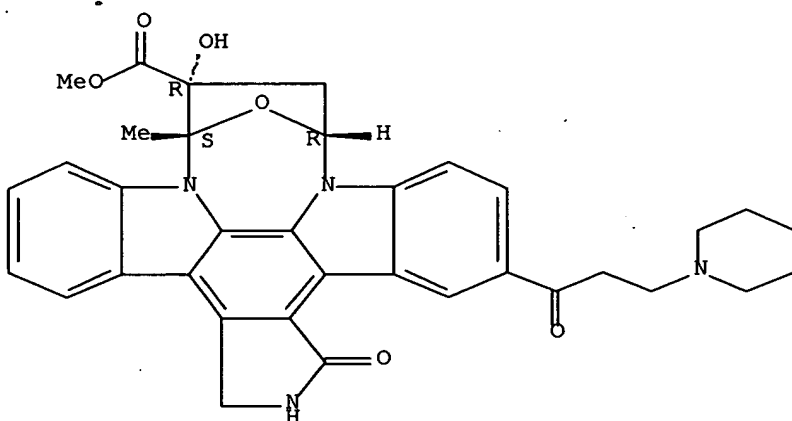
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis(1-piperidinylacetyl)-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200632-63-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[1-oxo-3-(1-piperidinyl)propyl]-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

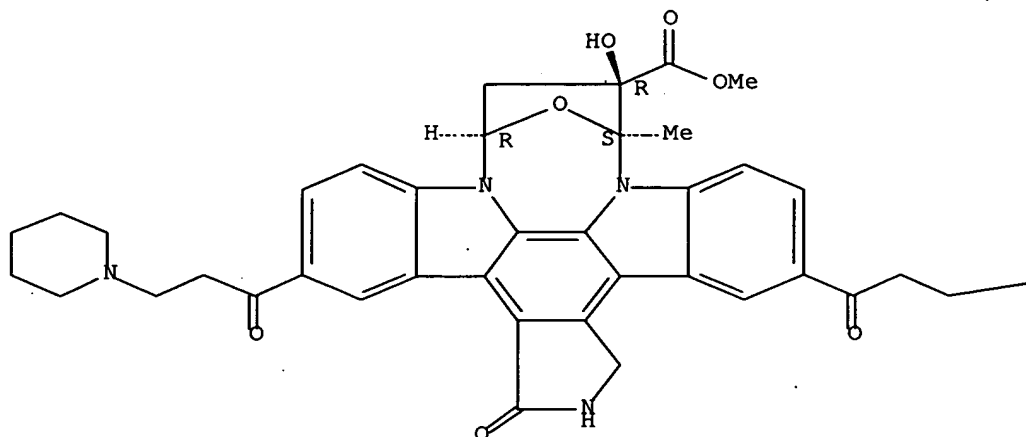
Absolute stereochemistry.



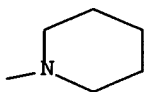
RN 200632-64-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[1-oxo-3-(1-piperidinyl)propyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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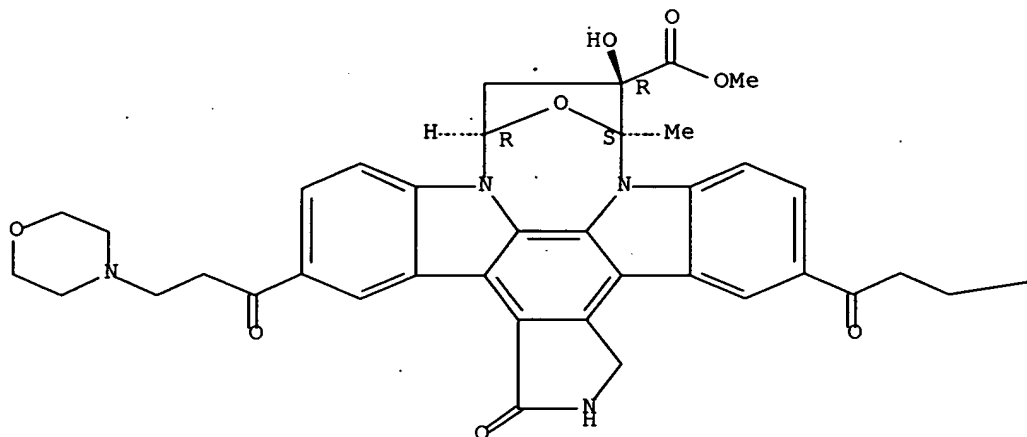
PAGE 1-B



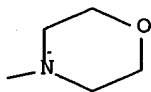
RN 200632-65-1 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[3-(4-morpholinyl)-1-oxopropyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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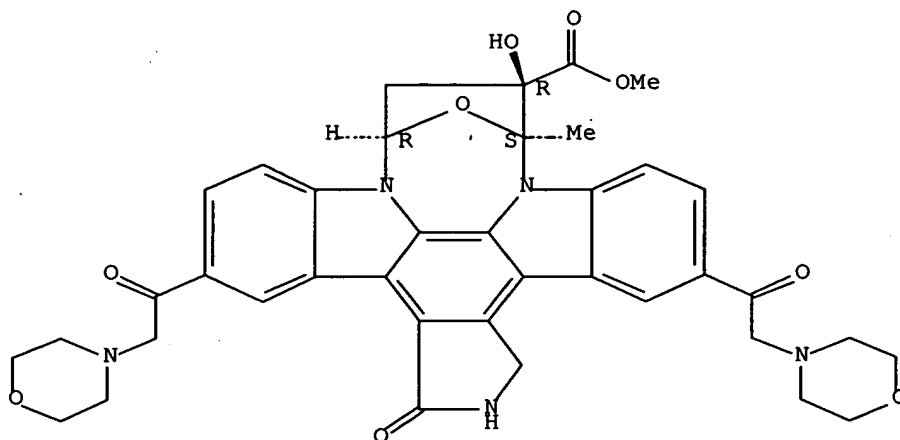


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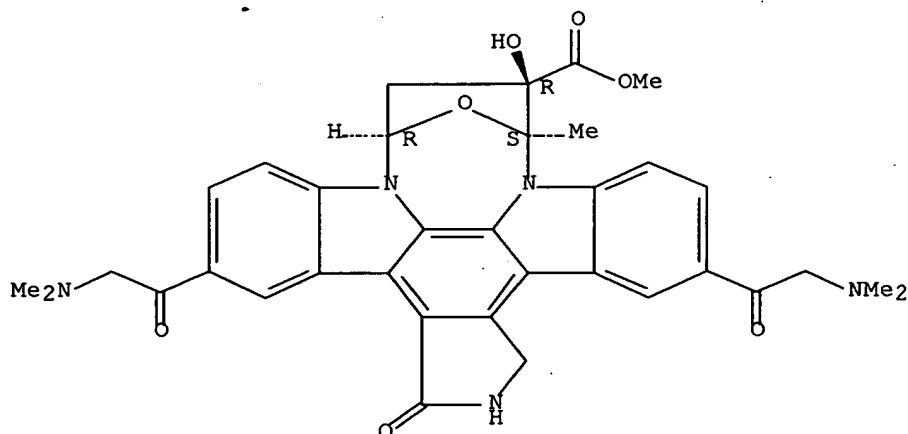
RN 200632-66-2 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis(4-morpholinylacetyl)-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



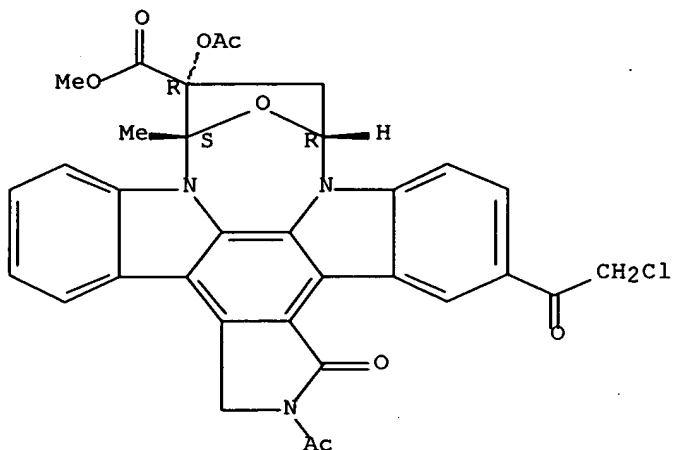
RN 200632-67-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(dimethylamino)acetyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200632-68-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-(chloroacetyl)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

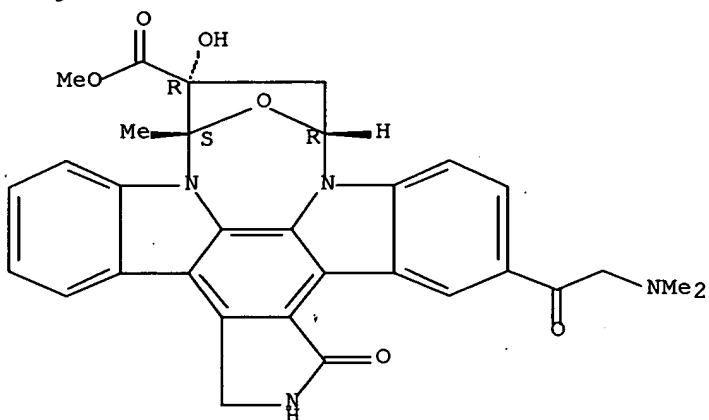
Absolute stereochemistry.



RN 200632-69-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(dimethylamino)acetyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

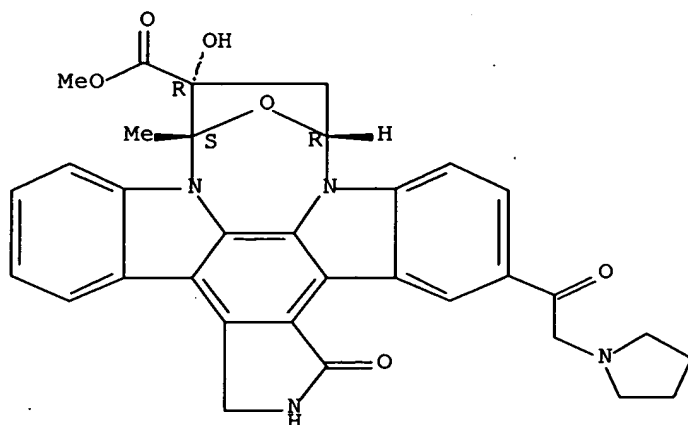
Absolute stereochemistry.



RN 200632-70-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-(1-pyrrolidinylacetyl)-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

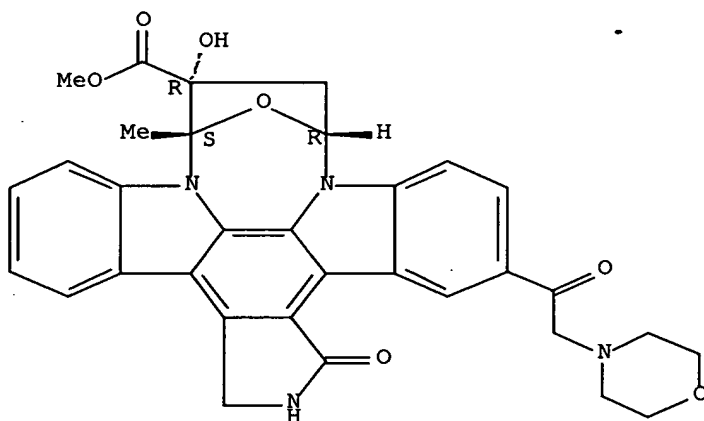
Absolute stereochemistry.



RN 200632-72-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-16-(4-morpholinylacetyl)-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

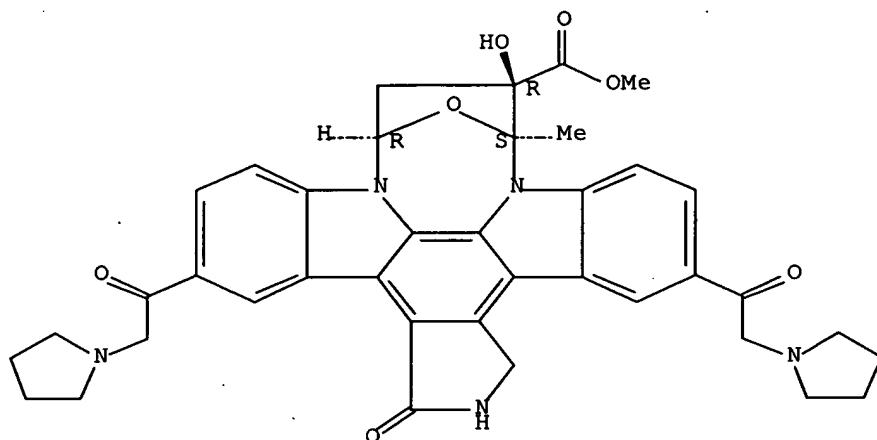
Absolute stereochemistry.



RN 200632-73-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis(1-pyrrolidinylacetyl)-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

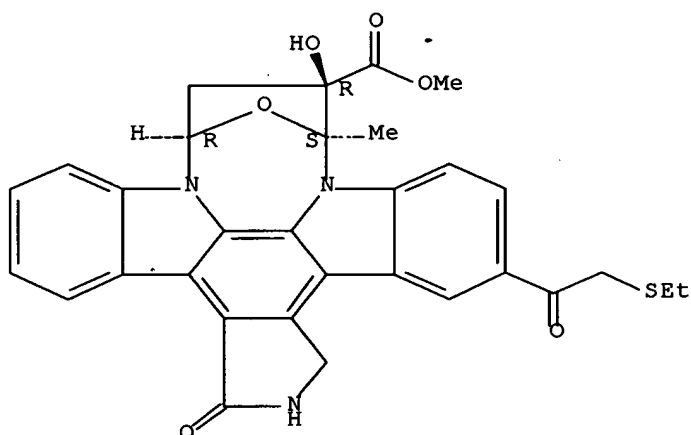
Absolute stereochemistry.



RN 200632-76-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[(ethylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

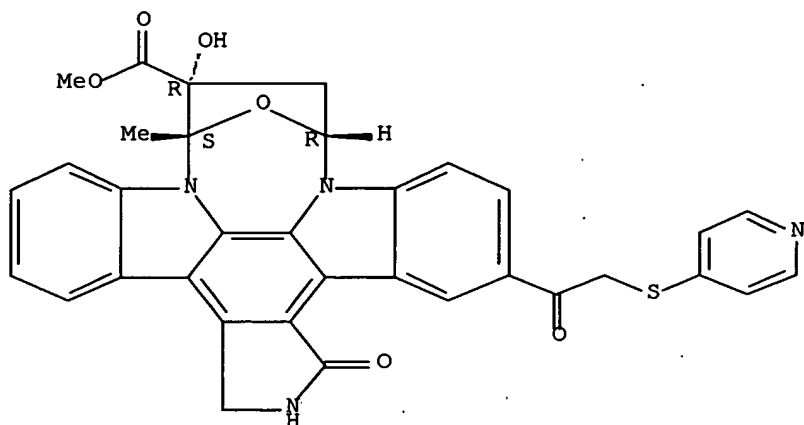
Absolute stereochemistry.



RN 200632-77-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(4-pyridinylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

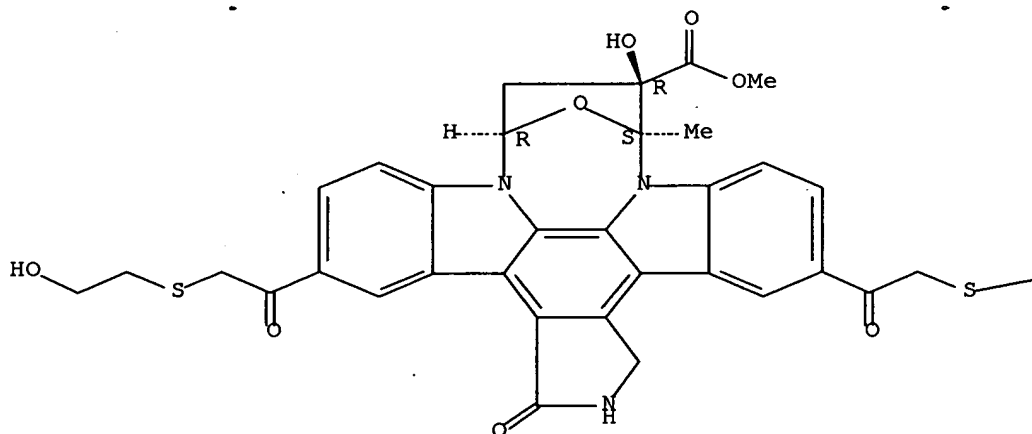


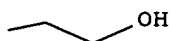
RN 200632-81-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis[[(2-hydroxyethyl)thio]acetyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

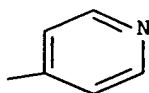
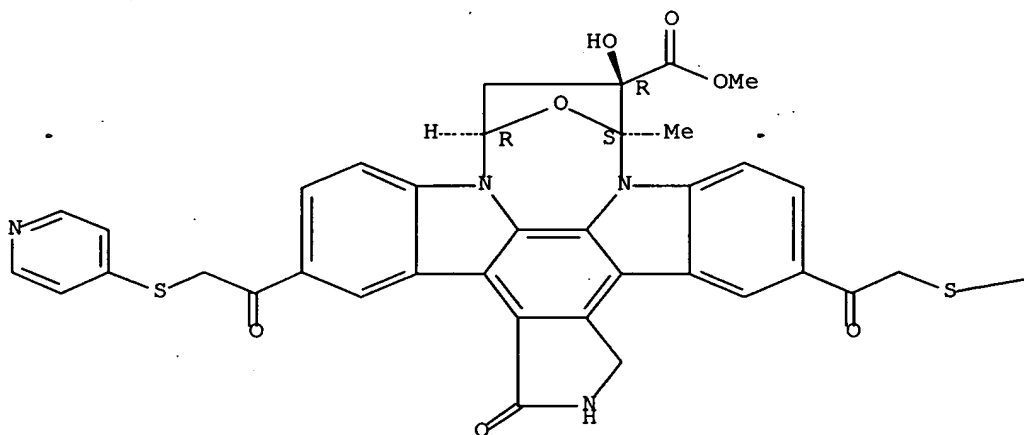
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RN 200632-82-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(4-pyridinylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

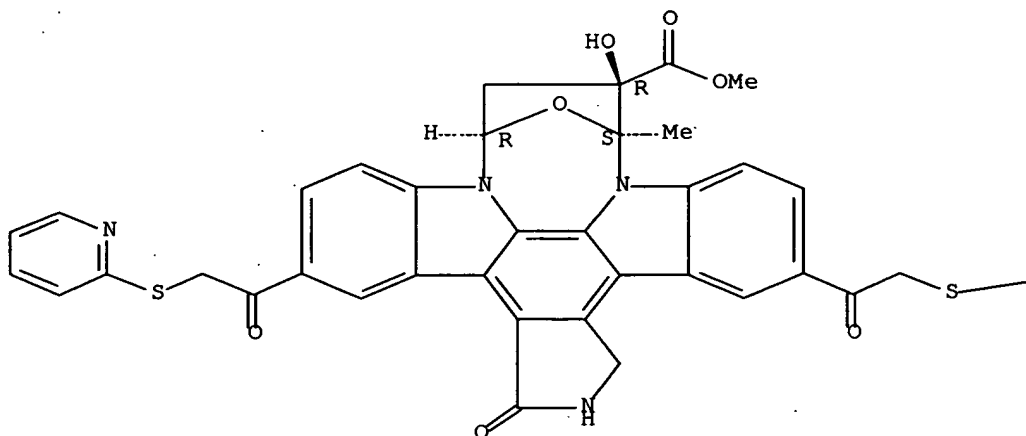


RN 200632-83-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-

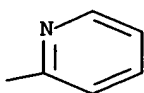
i)[1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(2-pyridinylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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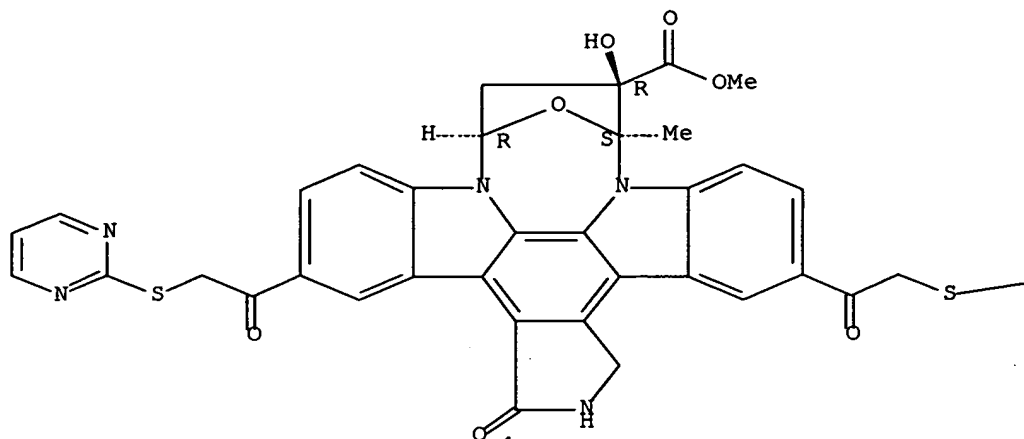
PAGE 1-B



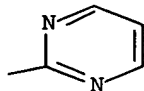
RN 200632-84-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(2-pyrimidinylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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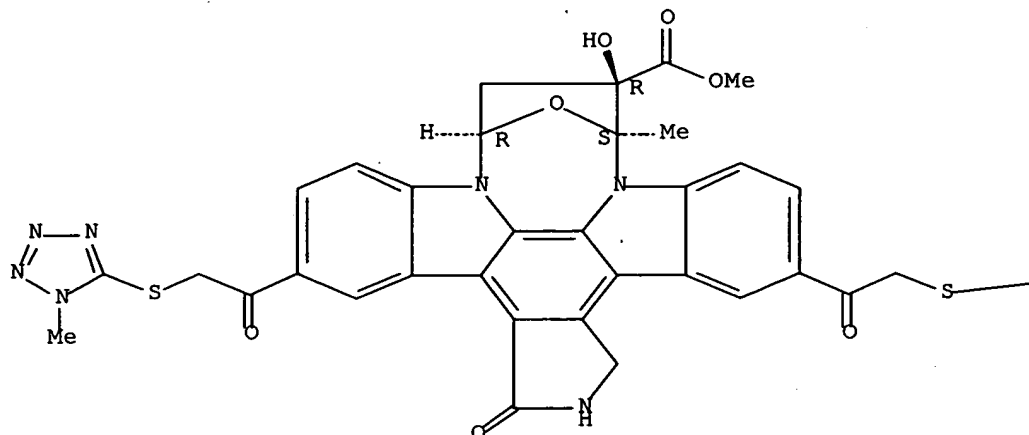
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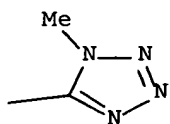
RN 200632-87-7 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[[(1-methyl-1H-tetrazol-5-yl)thio]acetyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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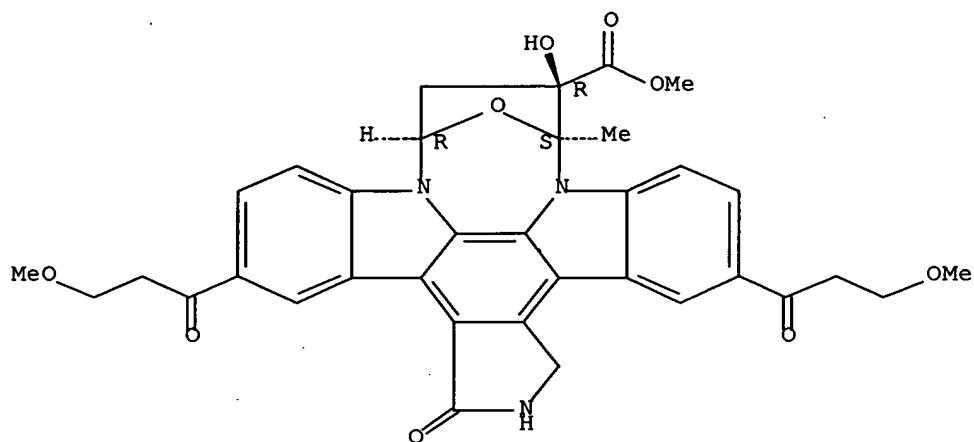


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RN 200632-89-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(3-methoxy-1-oxopropyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

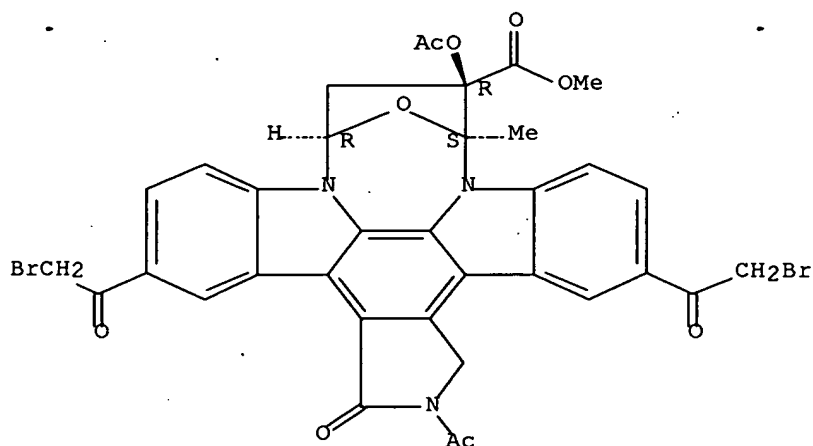
Absolute stereochemistry.



RN 200632-92-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-bis(bromoacetyl)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

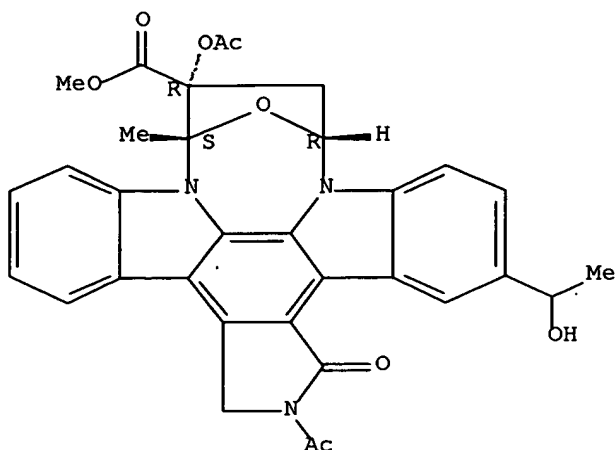
Absolute stereochemistry.



RN 200632-93-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-(1-hydroxyethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

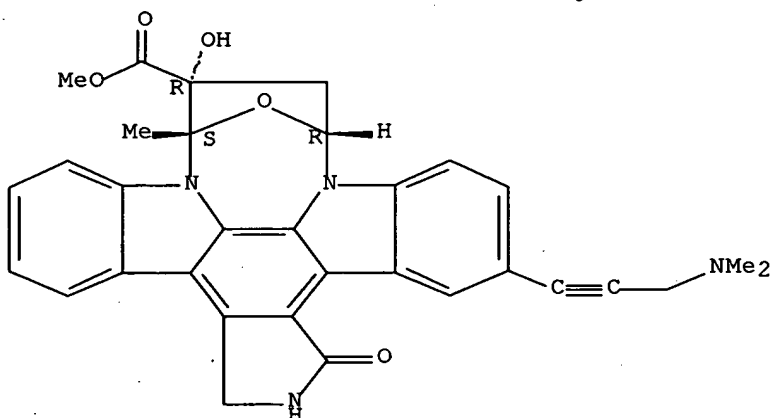
Absolute stereochemistry.



RN 200632-96-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[3-(dimethylamino)-1-propynyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

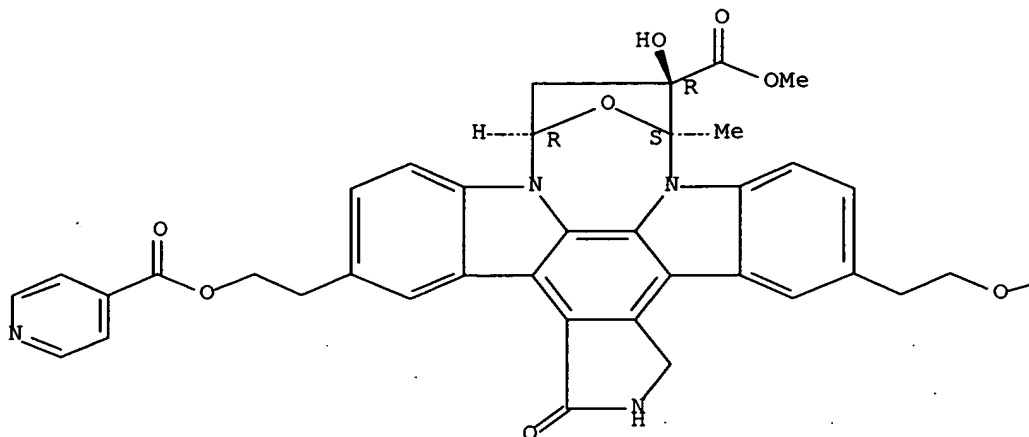


RN 200633-16-5 CAPLUS

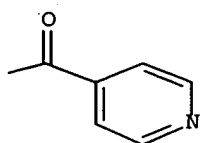
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[2-[(4-pyridinylcarbonyl)oxy]ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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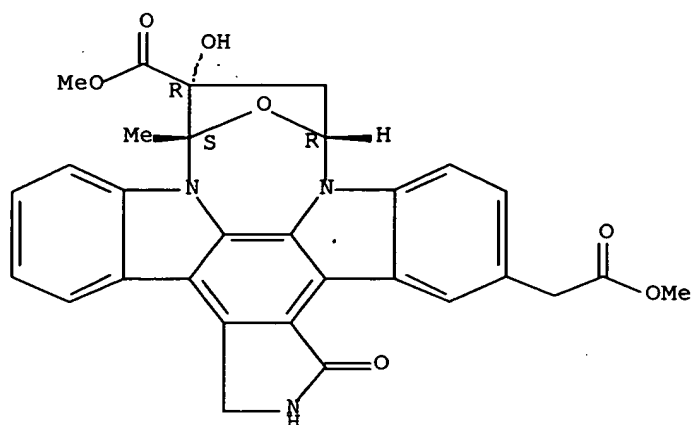


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RN 200633-18-7 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-5-acetic acid, 2,3,9,10,11,12-hexahydro-11-hydroxy-11-(methoxycarbonyl)-12-methyl-3-oxo-, methyl ester, (9R,11R,12S)- (9CI)
 (CA INDEX NAME)

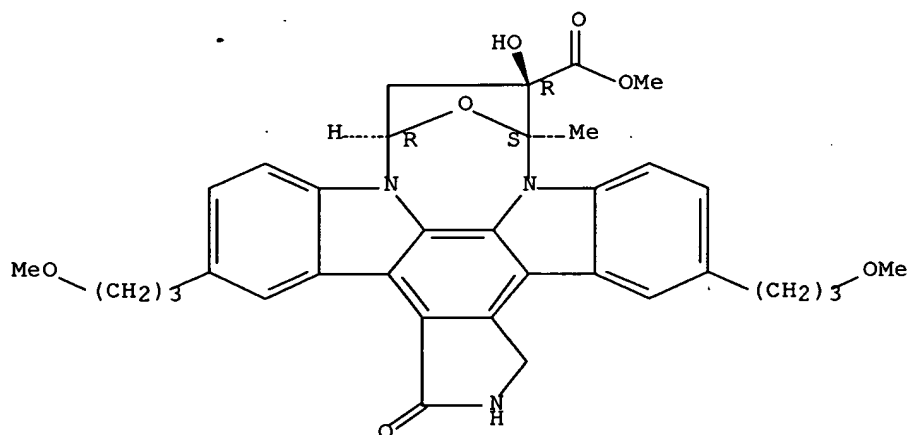
Absolute stereochemistry.



RN 200633-22-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(3-methoxypropyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

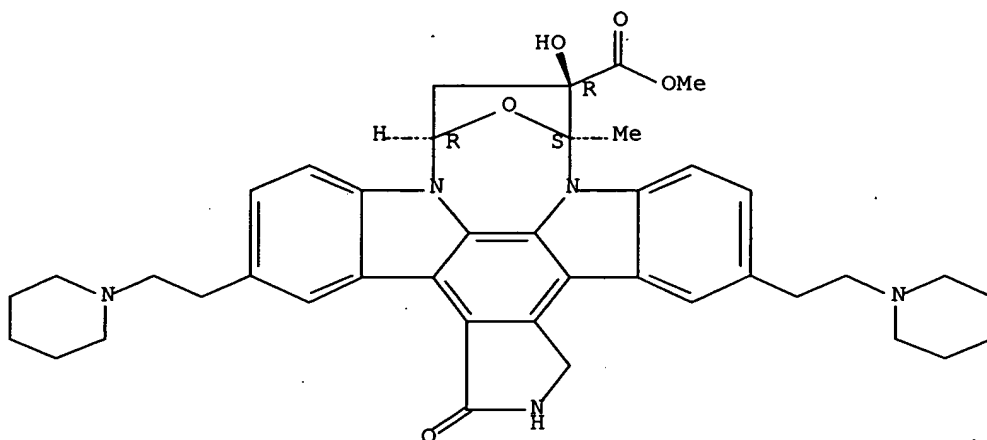
Absolute stereochemistry.



RN 200633-24-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[2-(1-piperidinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

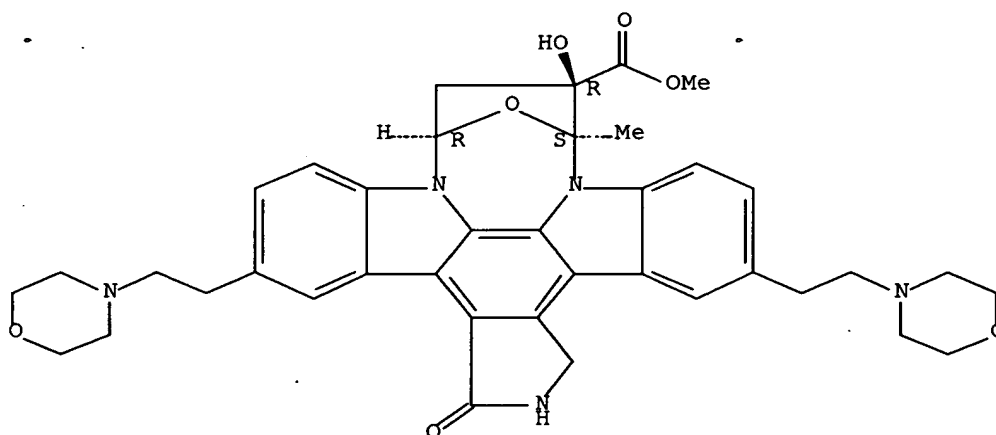
Absolute stereochemistry.



RN 200633-26-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[2-(4-morpholinyl)ethyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

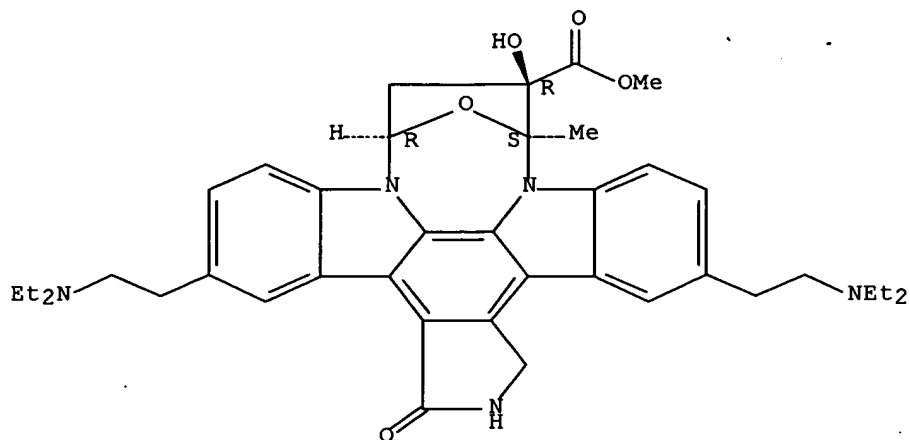
Absolute stereochemistry.



RN 200633-28-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[2-(dimethylamino)ethyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

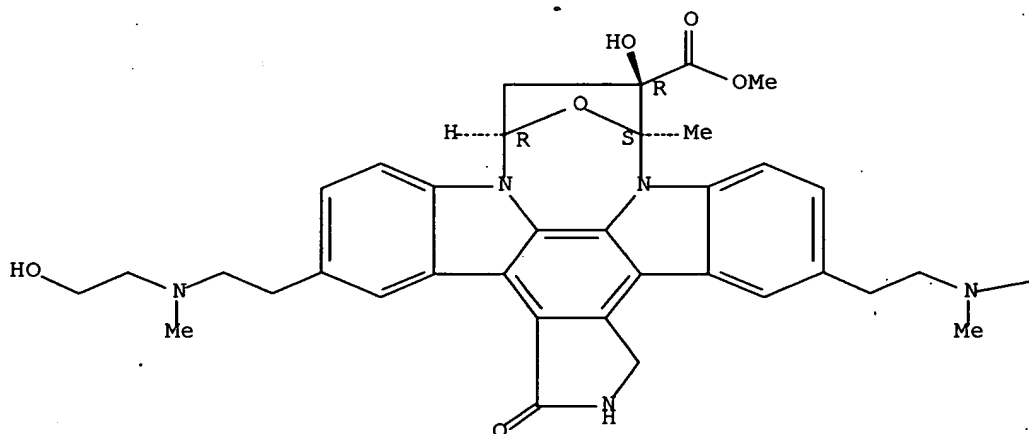


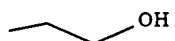
RN 200633-30-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis[2-[(2-hydroxyethyl)methylamino]ethyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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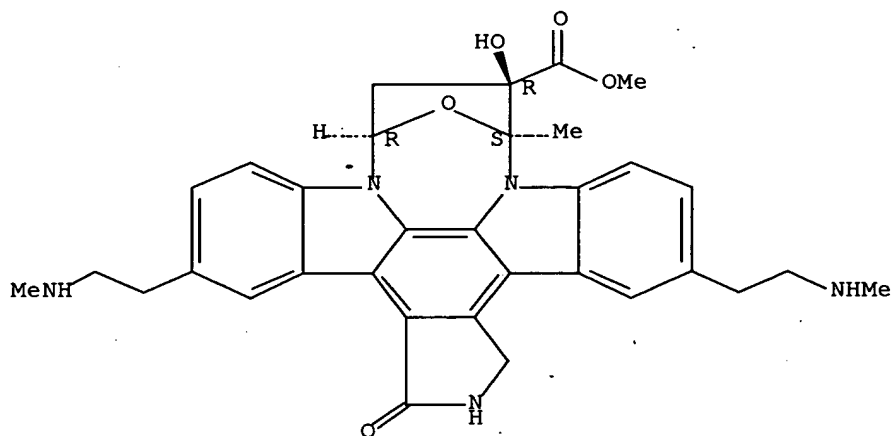




RN 200633-32-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[2-(methylamino)ethyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

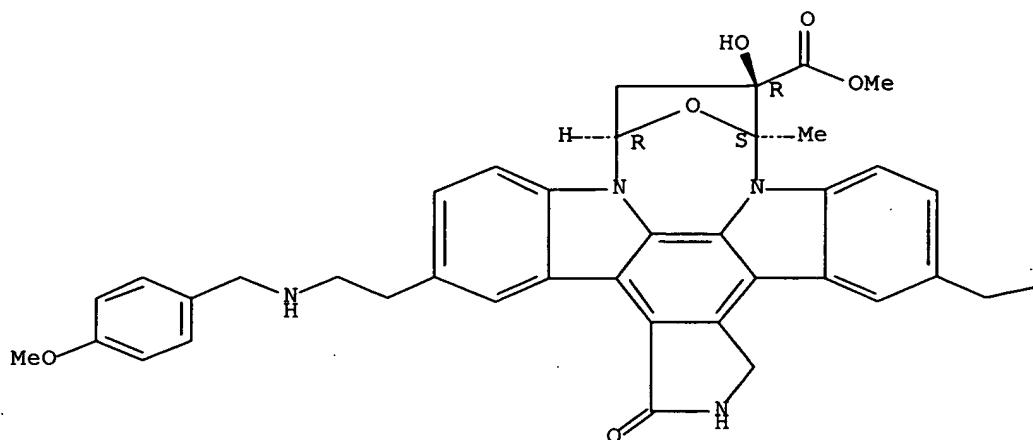


RN 200633-34-7 CAPLUS

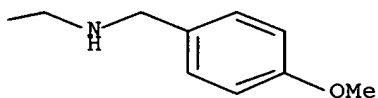
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis[2-[(4-methoxyphenyl)methyl]amino]ethyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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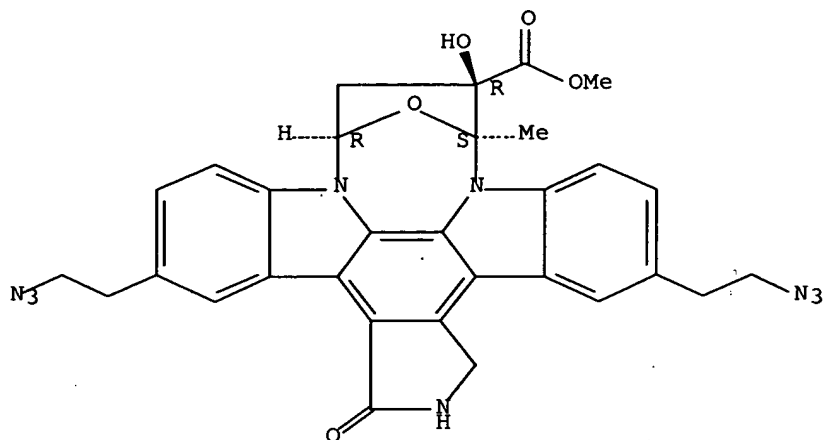


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RN 200633-36-9 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis(2-azidoethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

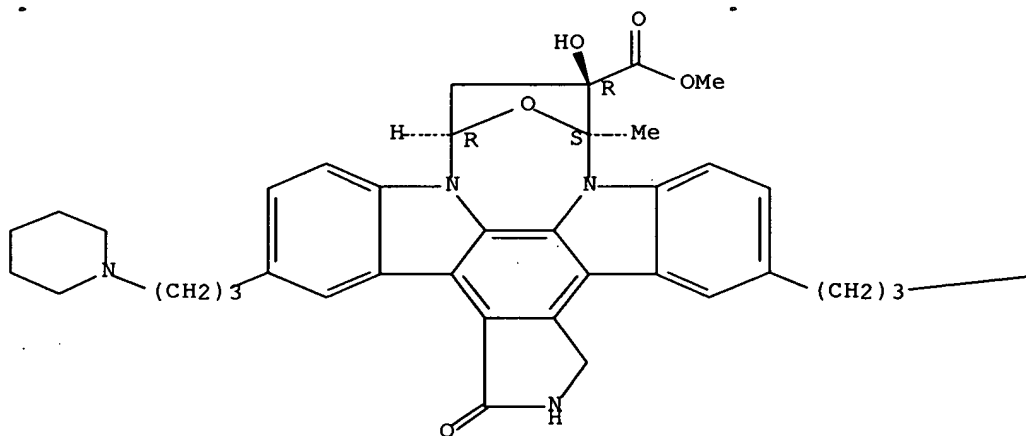


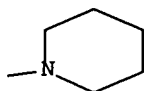
RN 200633-38-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[3-(1-piperidinyl)propyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

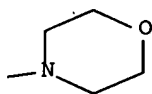
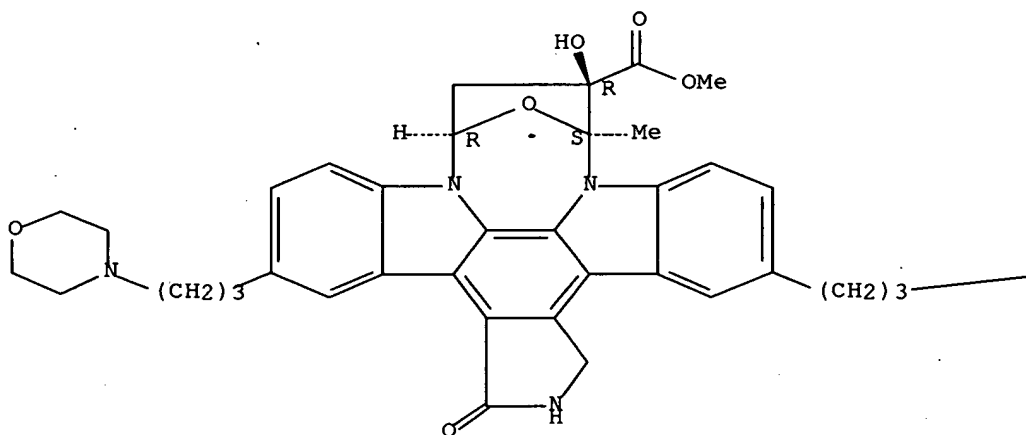
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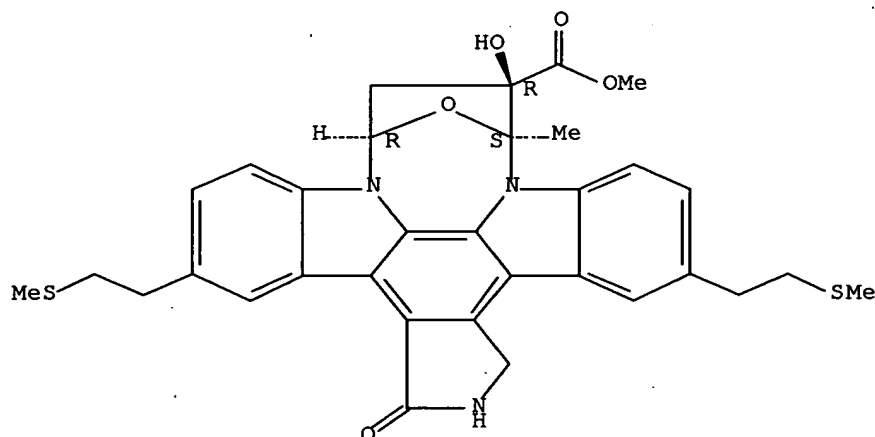
RN 200633-40-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[3-(4-morpholinyl)propyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



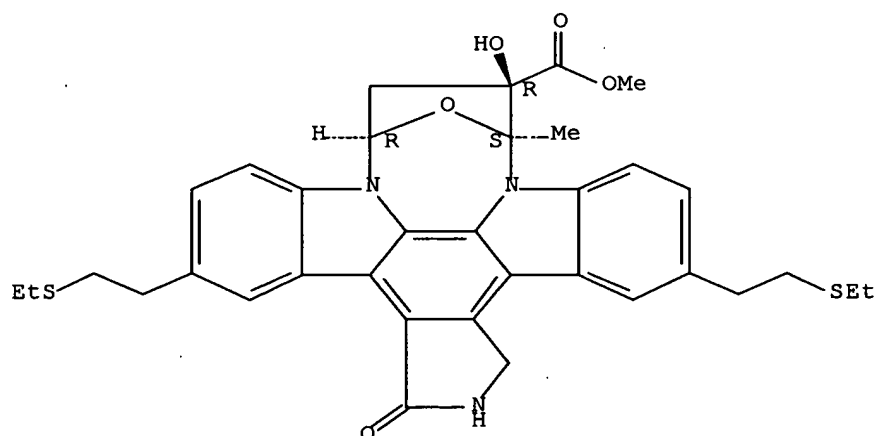
RN 200633-48-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-

Absolute stereochemistry.



CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[2-(ethylthio)ethyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI). (CA INDEX NAME)

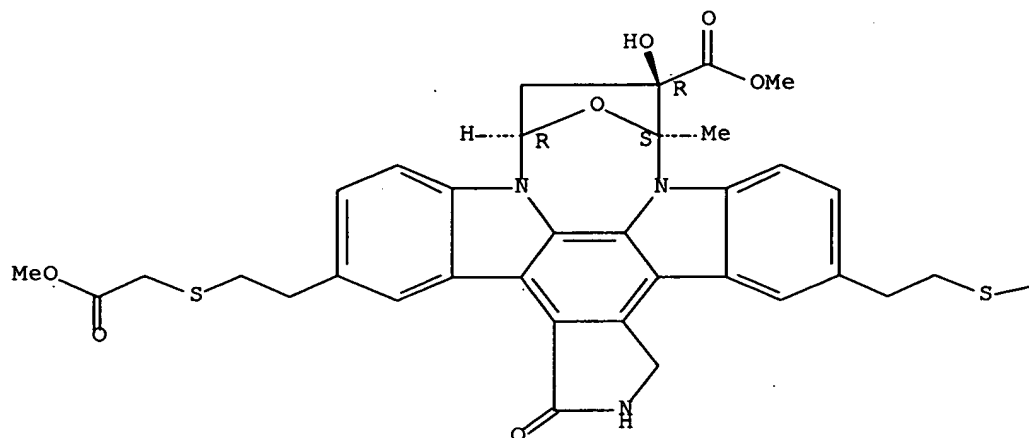
Absolute stereochemistry.



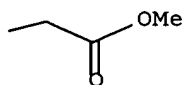
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis[2-[(2-methoxy-2-oxoethyl)thio]ethyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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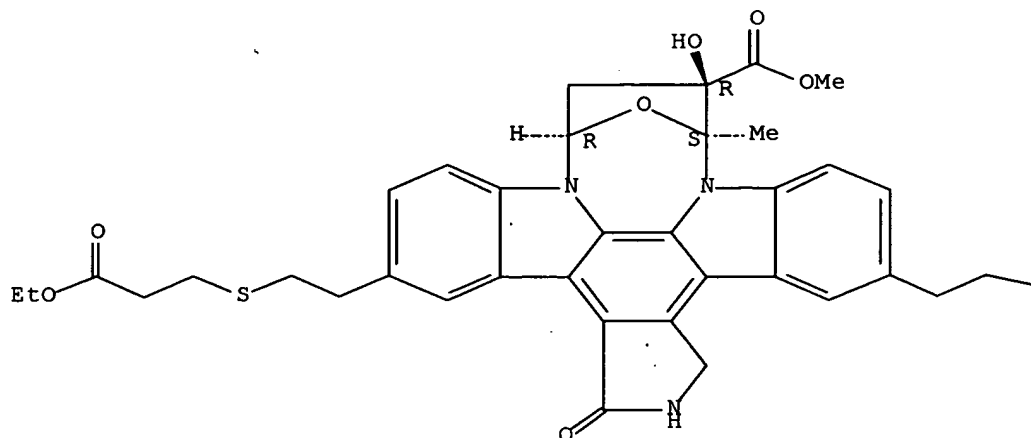
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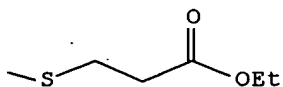
RN 200633-54-1 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[2-[(3-ethoxy-3-oxopropyl)thio]ethyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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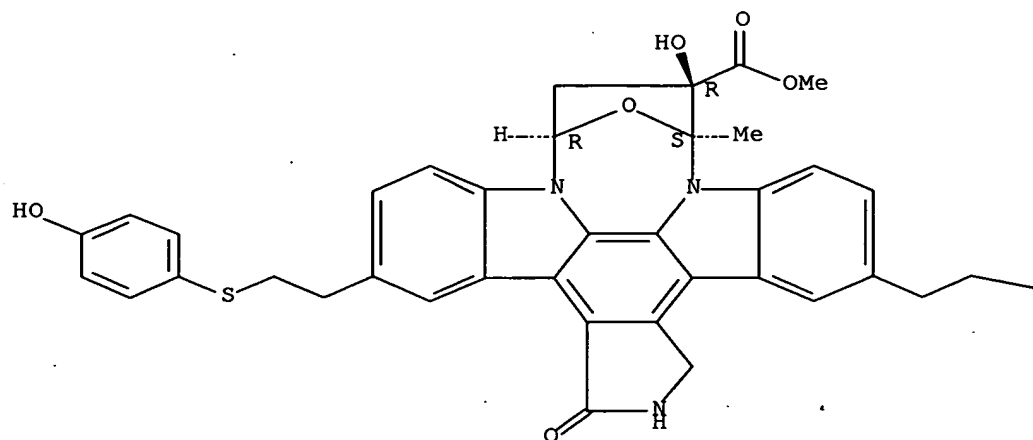


RN 200633-56-3 CAPLUS

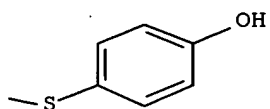
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis[2-[(4-hydroxyphenyl)thio]ethyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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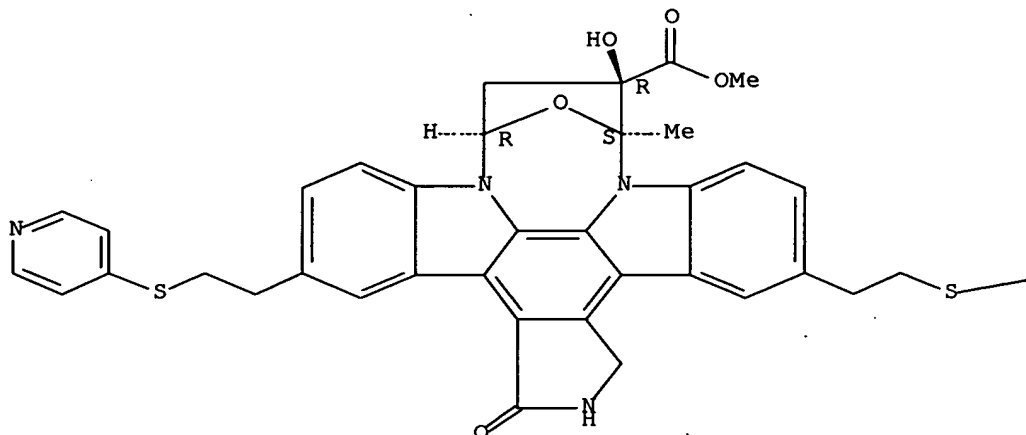
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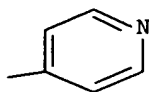
RN 200633-60-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[2-(4-pyridinylthio)ethyl]-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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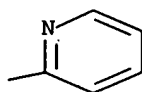
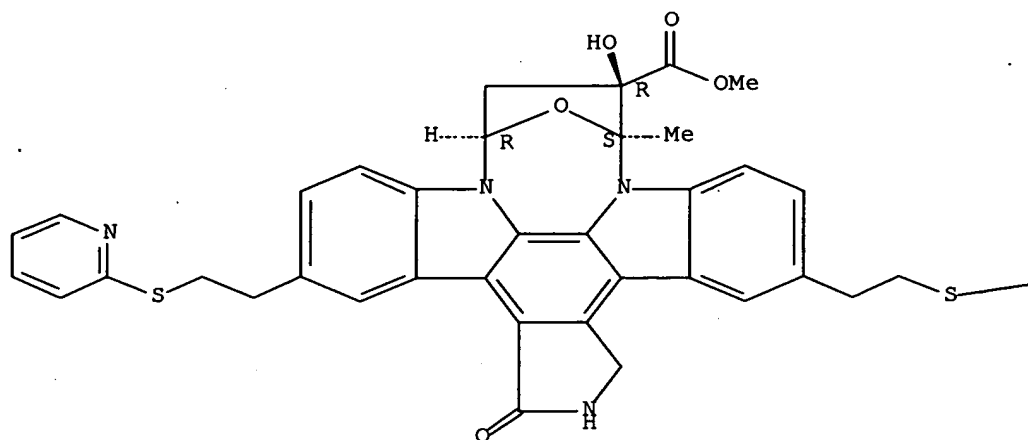


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RN 200633-62-1 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[2-(2-pyridinylthio)ethyl]-, methyl ester,
(9S,10R,12R)- (9CI) (CA INDEX NAME)

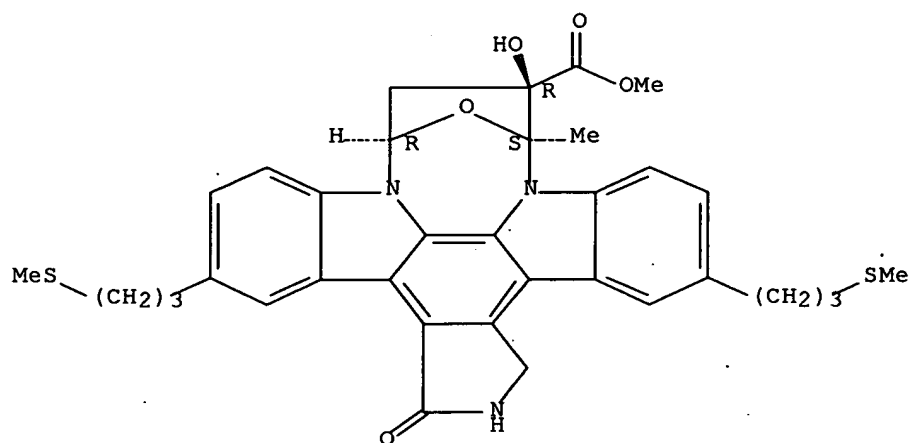
Absolute stereochemistry.



RN 200633-64-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[3-(methylthio)propyl]-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

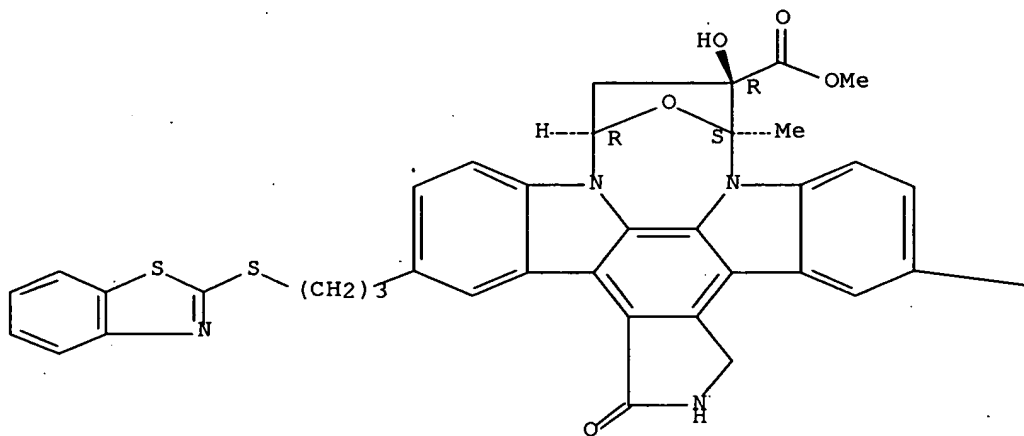
Absolute stereochemistry.

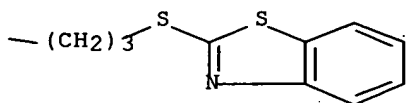


RN 200633-66-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[3-(2-benzothiazolylthio)propyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

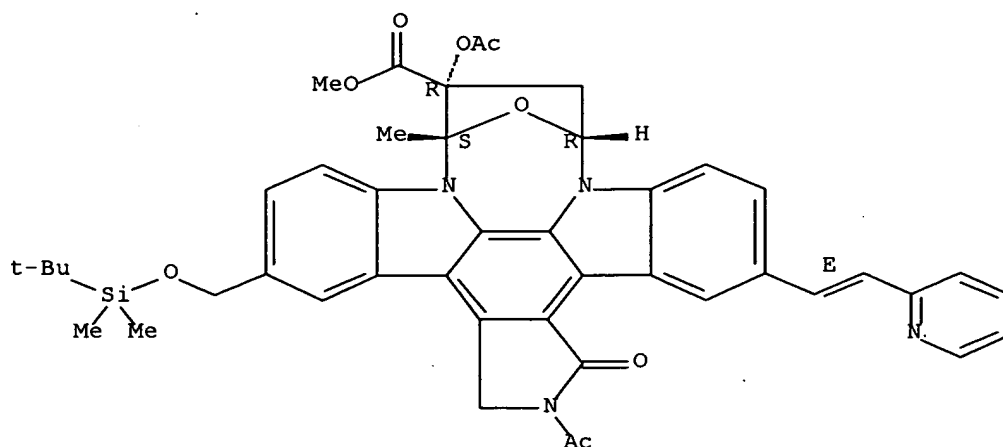
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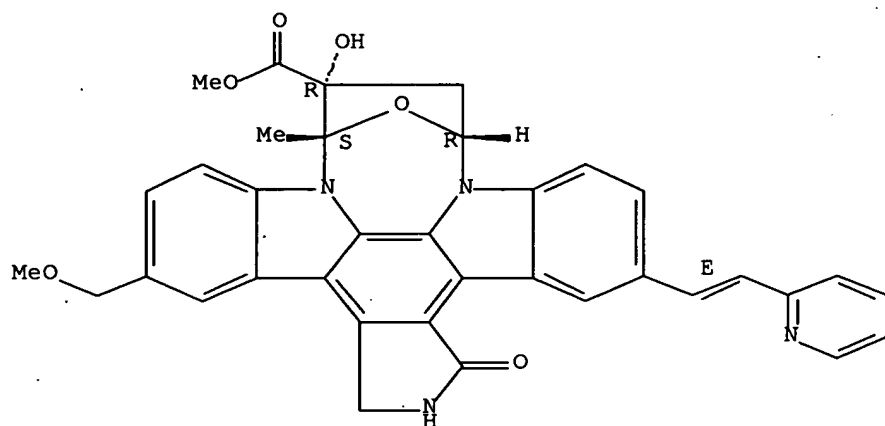
RN 200633-75-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 200633-79-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5-(methoxymethyl)-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

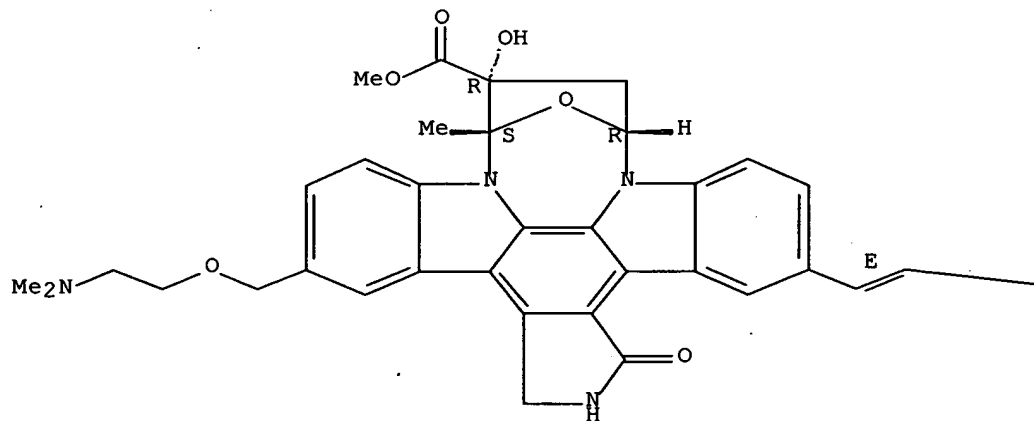
Absolute stereochemistry.
 Double bond geometry as shown.

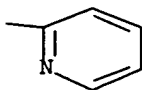


RN 200633-83-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[[2-(dimethylamino)ethoxy]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)-(9CI)
 (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

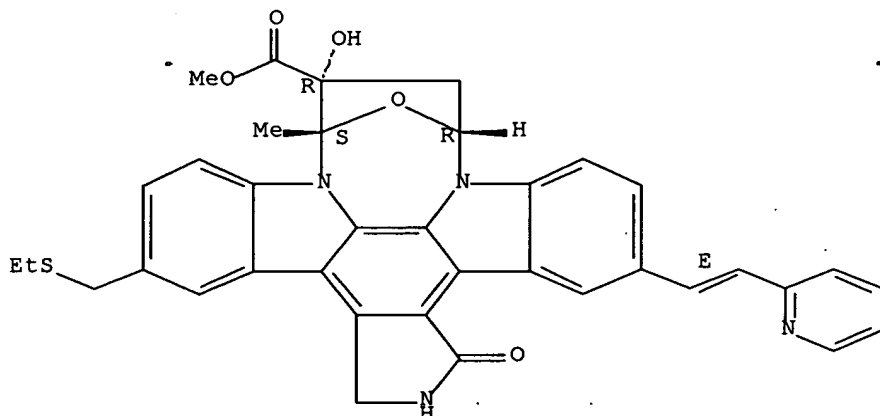
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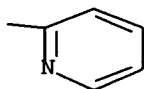
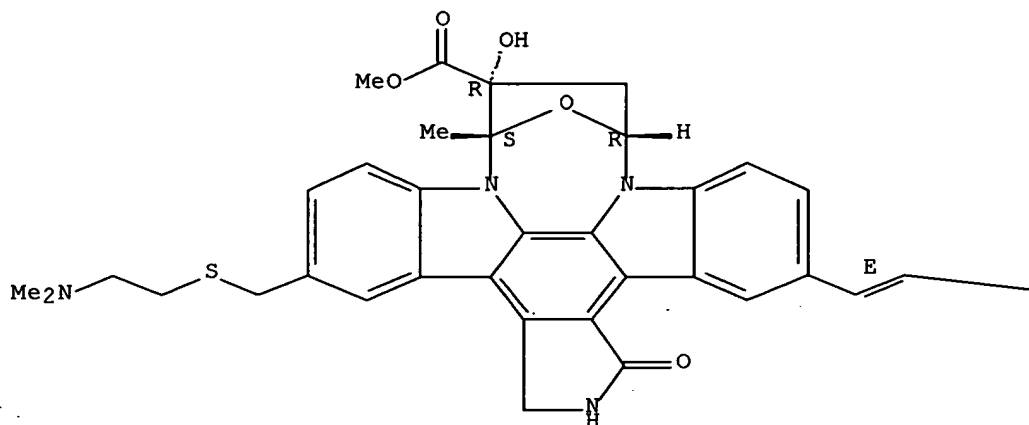
RN 200633-85-8 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 200633-87-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

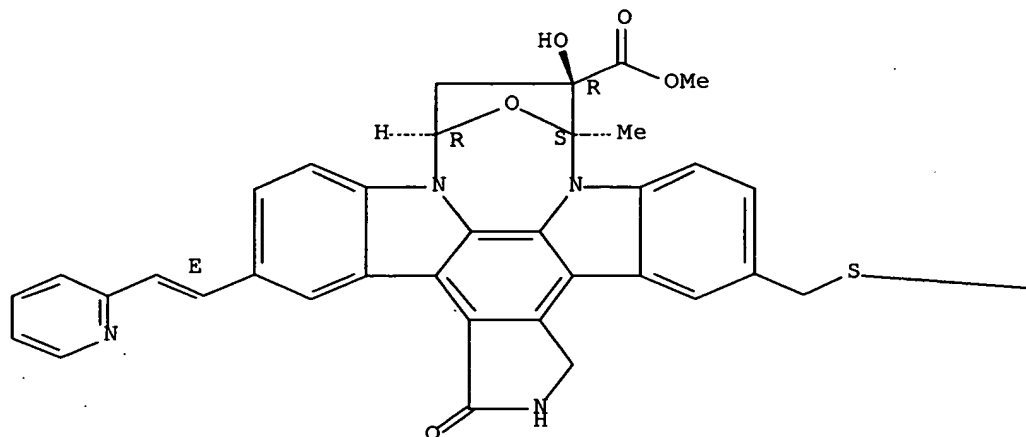
Absolute stereochemistry.
 Double bond geometry as shown.



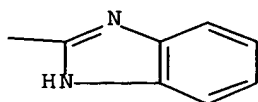
RN 200633-89-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[(1H-benzimidazol-2-ylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

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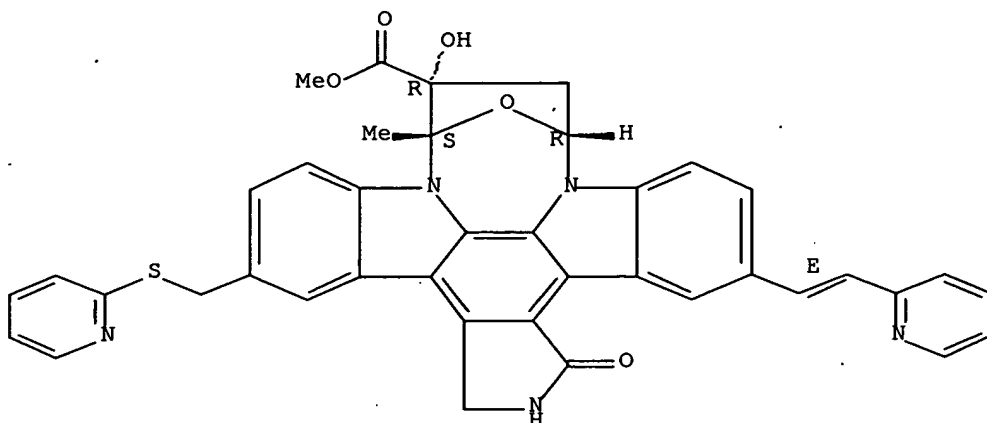


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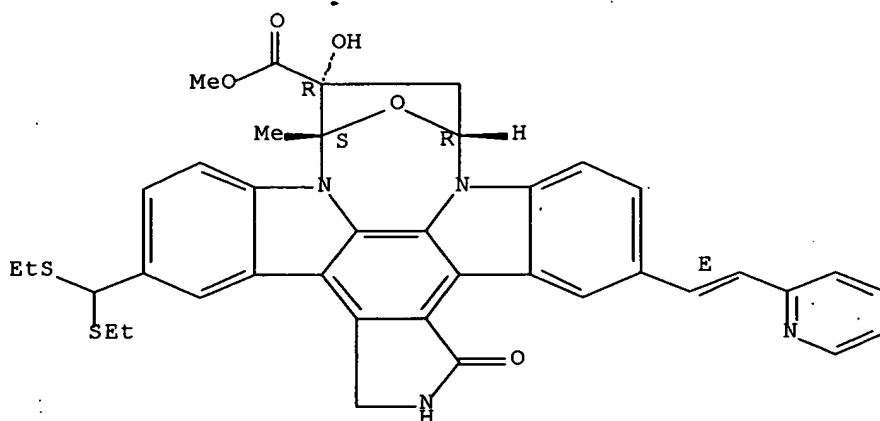
RN 200633-91-6 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-5-[(2-pyridinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



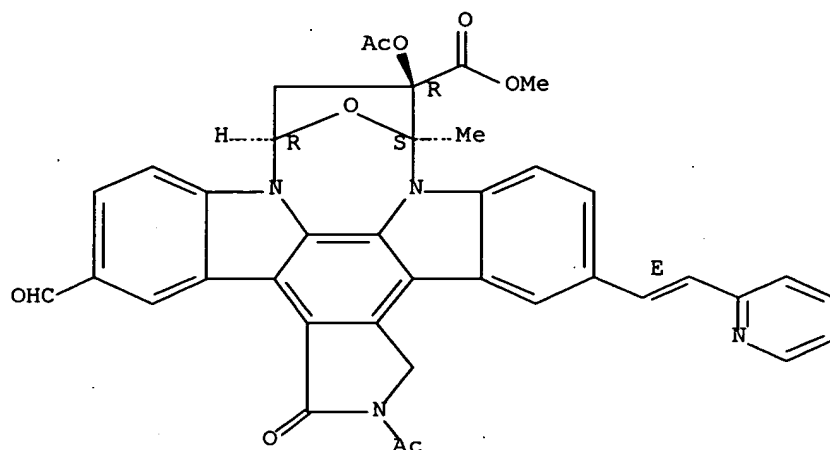
RN 200633-98-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[bis(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 200634-01-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

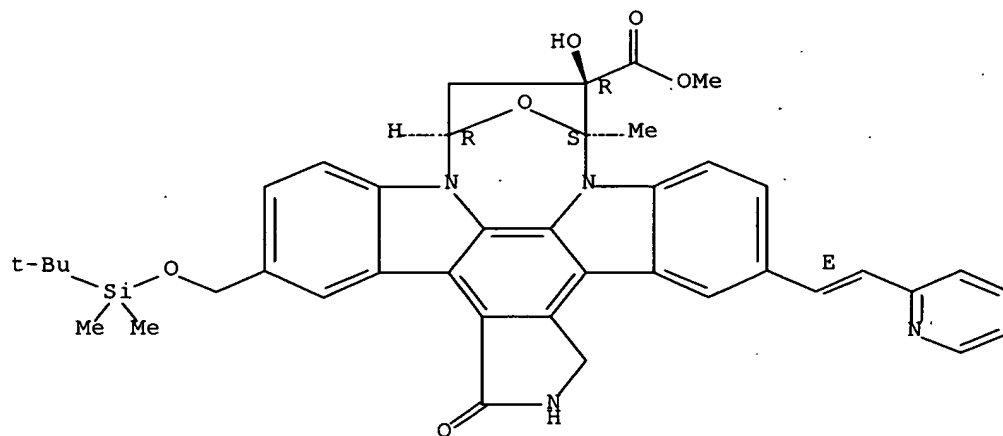


RN 200634-13-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

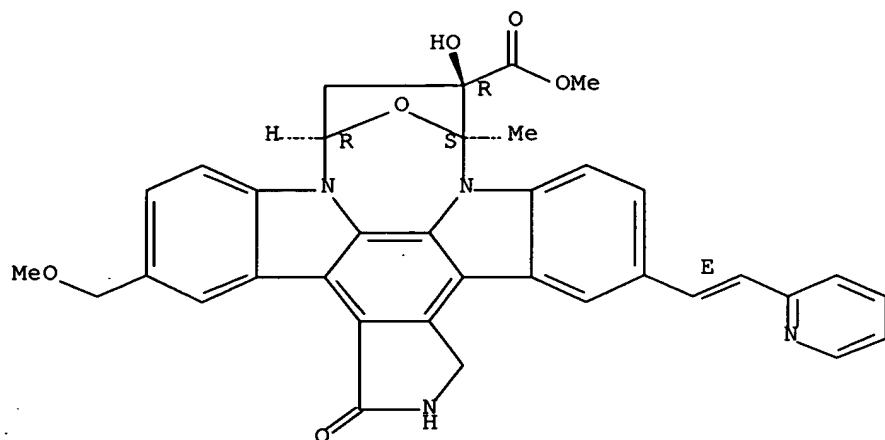


RN 200634-17-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-16-(methoxymethyl)-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

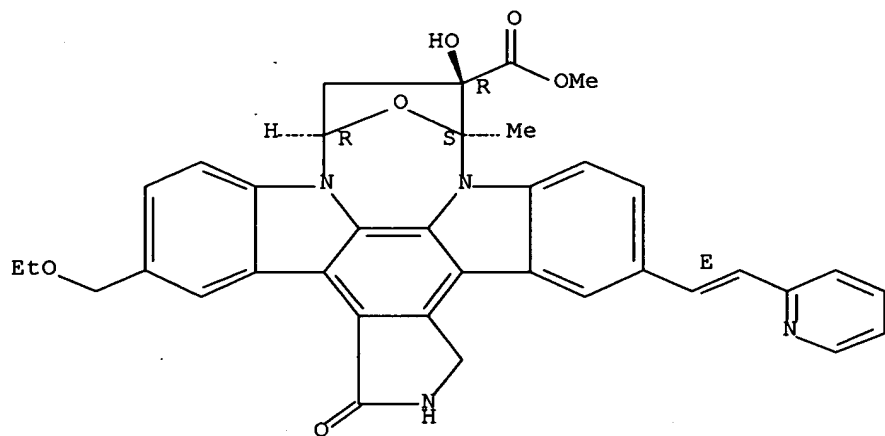


RN 200634-21-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

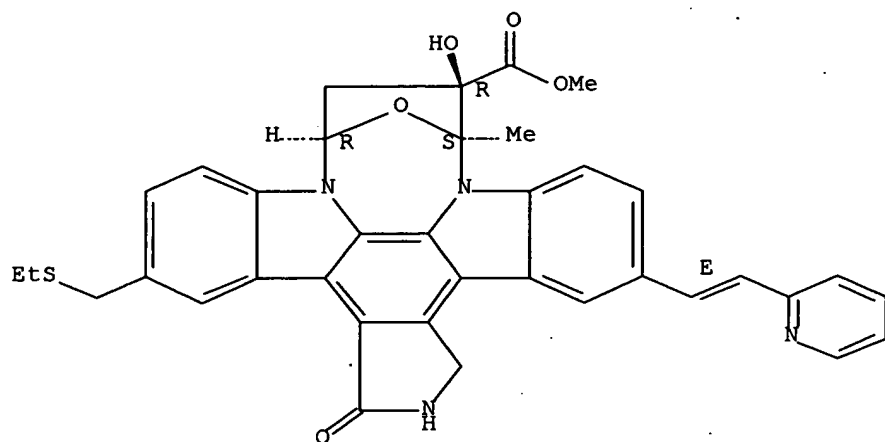


RN 200634-25-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

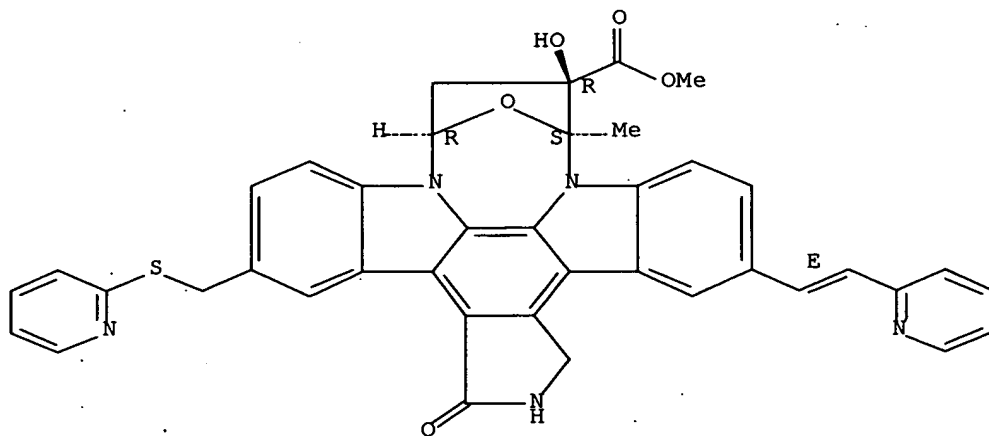
Double bond geometry as shown.



RN 200634-28-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-16-[(2-pyridinylthio)methyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

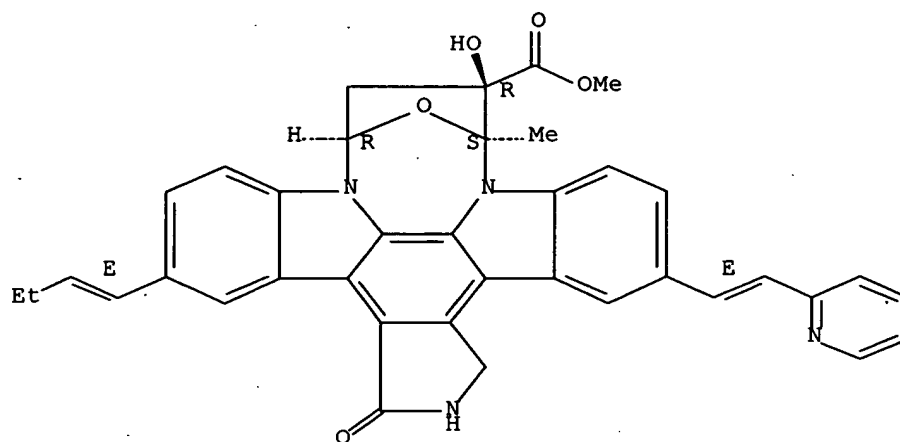
Absolute stereochemistry.
Double bond geometry as shown.



RN 200634-44-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-(1E)-1-butenyl-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(1E)-2-(2-pyridinyl)ethenyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

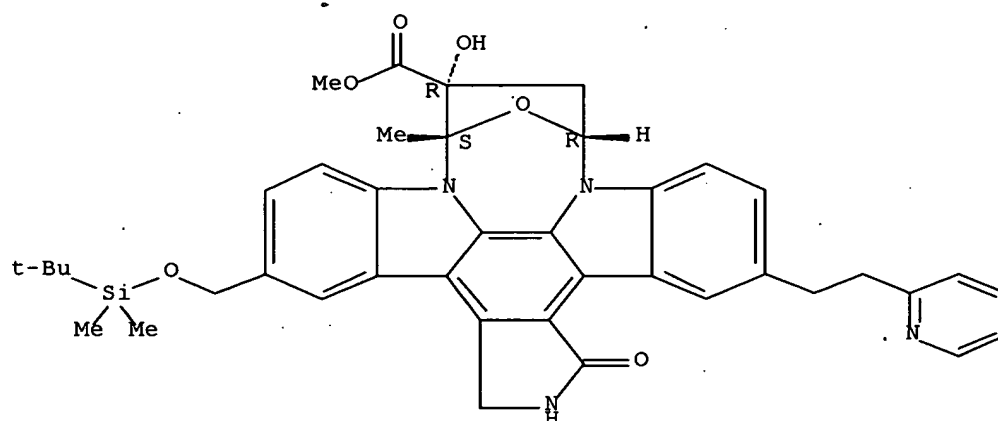
Absolute stereochemistry.
Double bond geometry as shown.



RN 200634-54-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

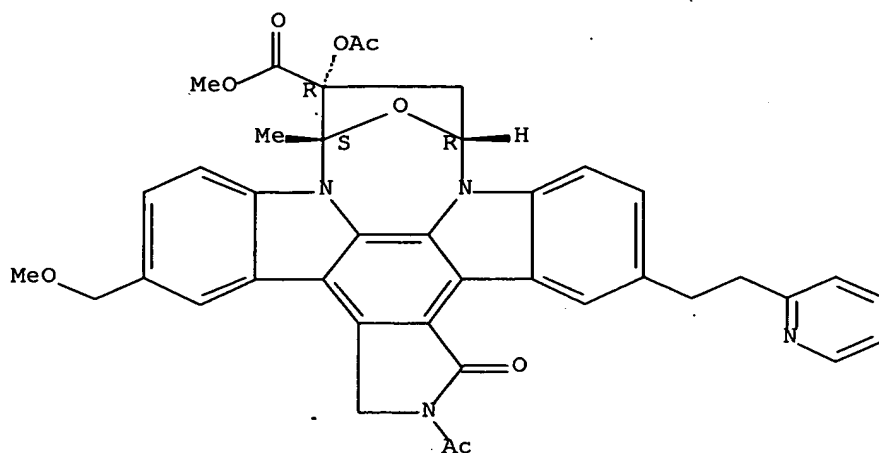
Absolute stereochemistry.



RN 200634-58-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5-(methoxymethyl)-9-methyl-1-oxo-16-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

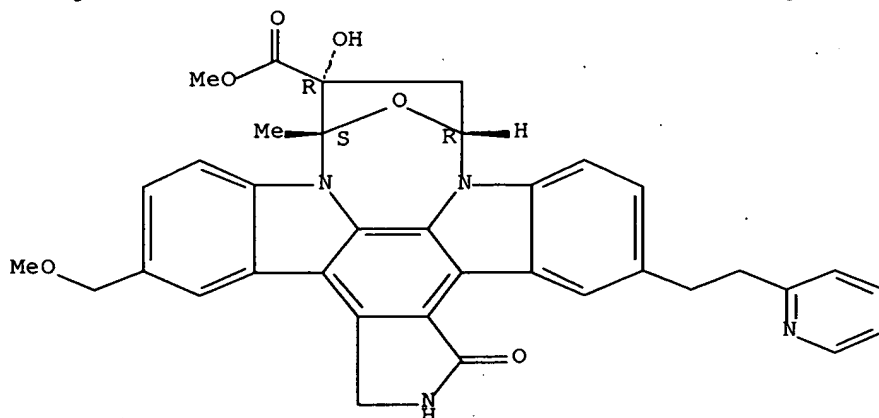
Absolute stereochemistry.



RN 200634-63-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5-(methoxymethyl)-9-methyl-1-oxo-16-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

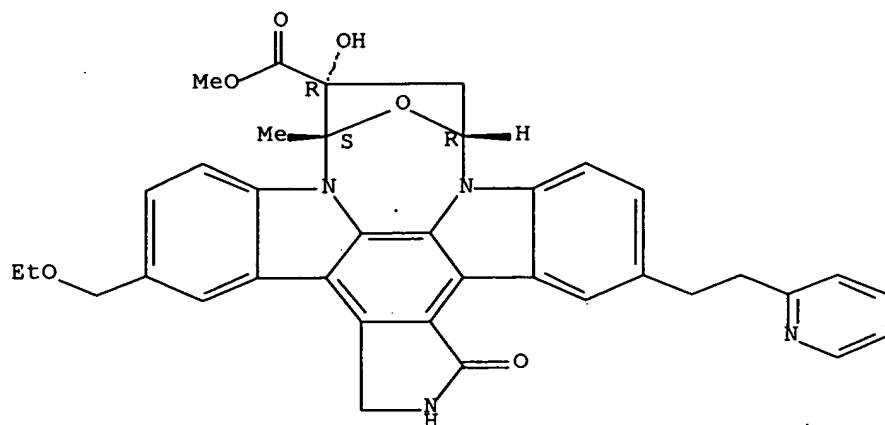
Absolute stereochemistry.



RN 200634-68-0 CAPLUS

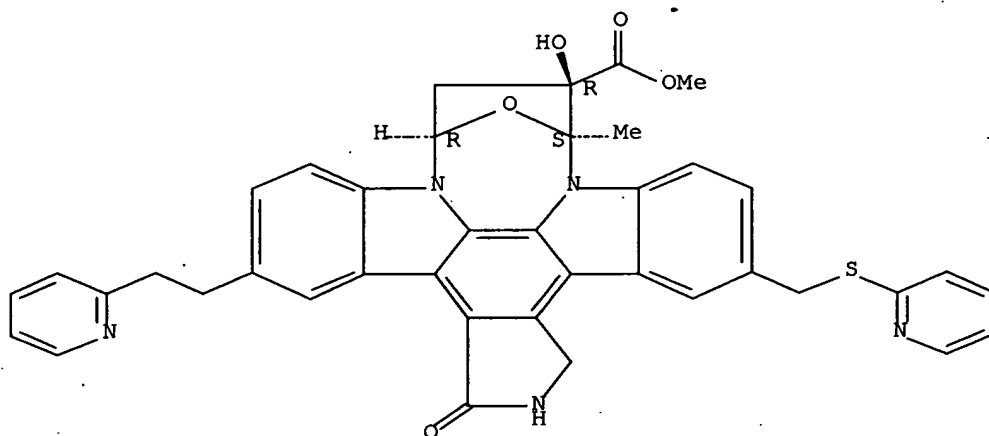
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



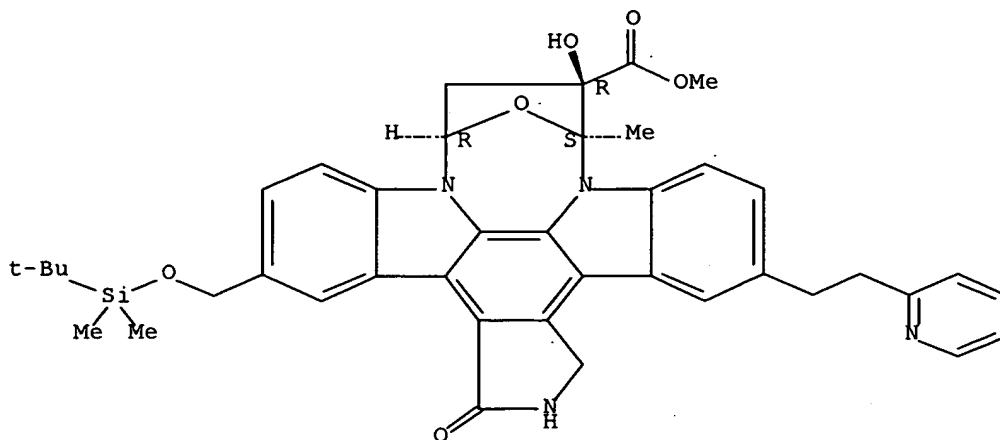
RN 200634-79-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[2-(2-pyridinyl)ethyl]-5-[(2-pyridinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200634-91-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

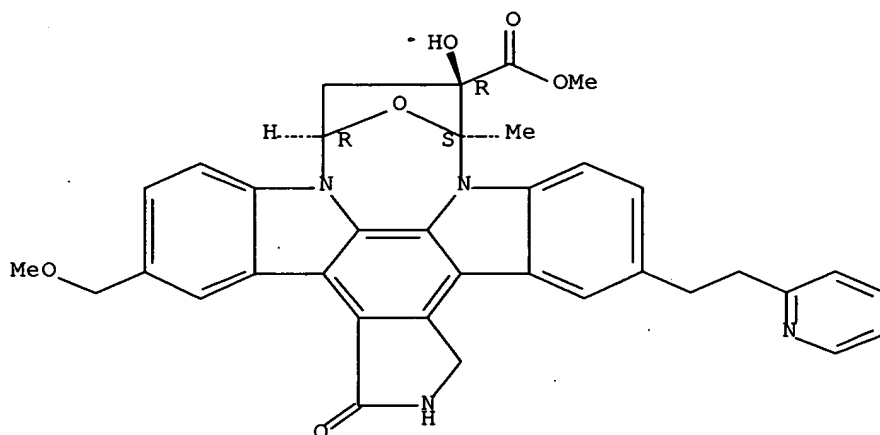
Absolute stereochemistry.



RN 200634-97-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-16-(methoxymethyl)-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

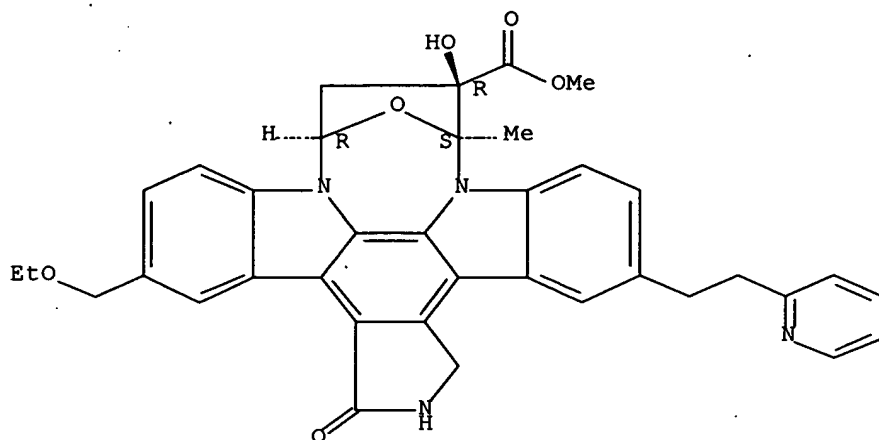
Absolute stereochemistry.



RN 200635-01-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

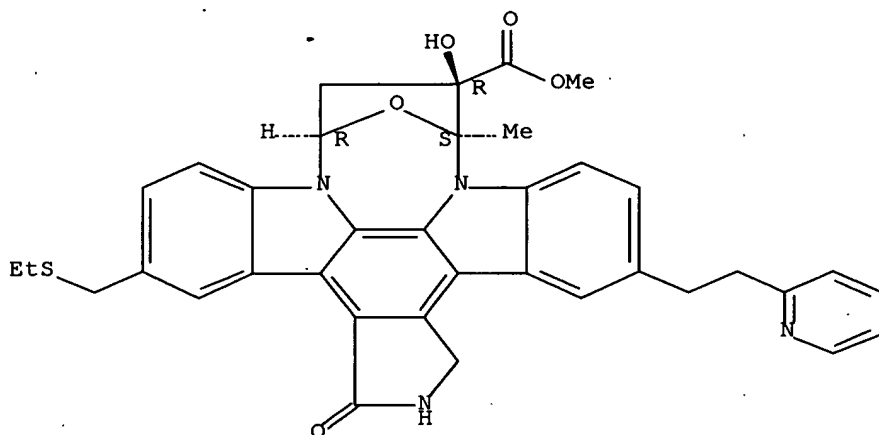
Absolute stereochemistry.



RN 200635-07-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

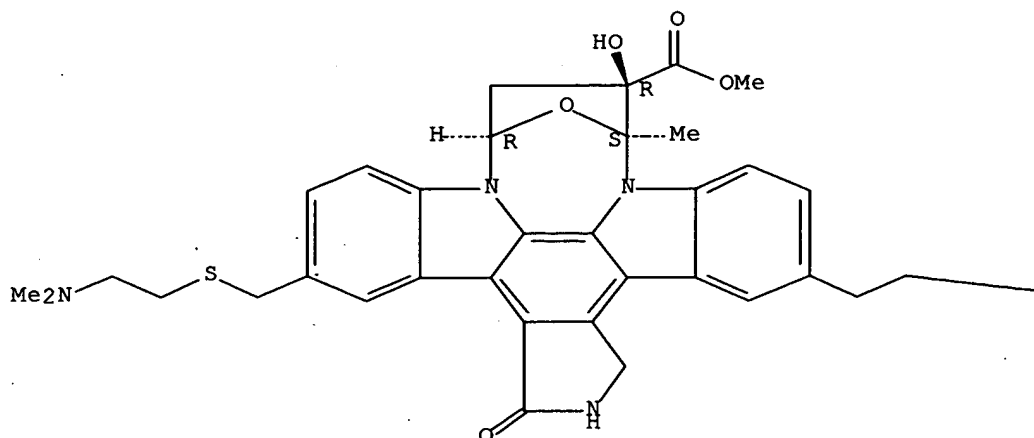


RN 200635-13-8 CAPLUS

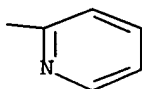
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

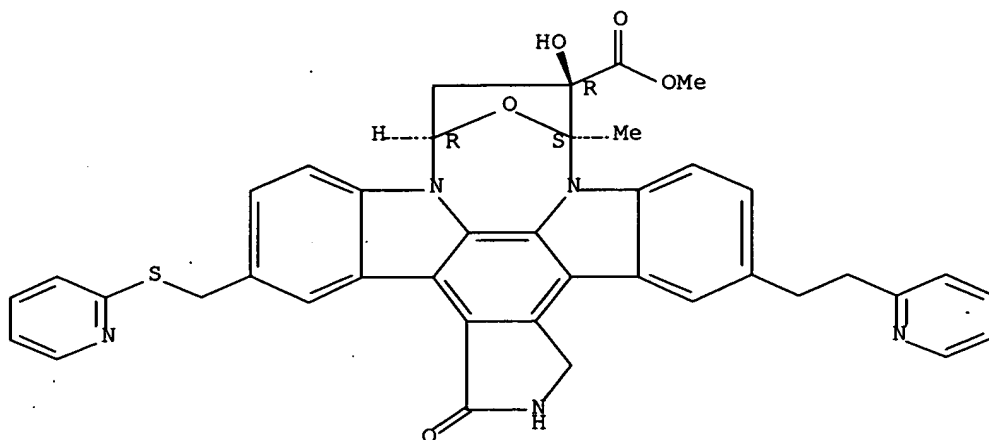


PAGE 1-B



RN 200635-23-0 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-16-[(2-pyridinylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

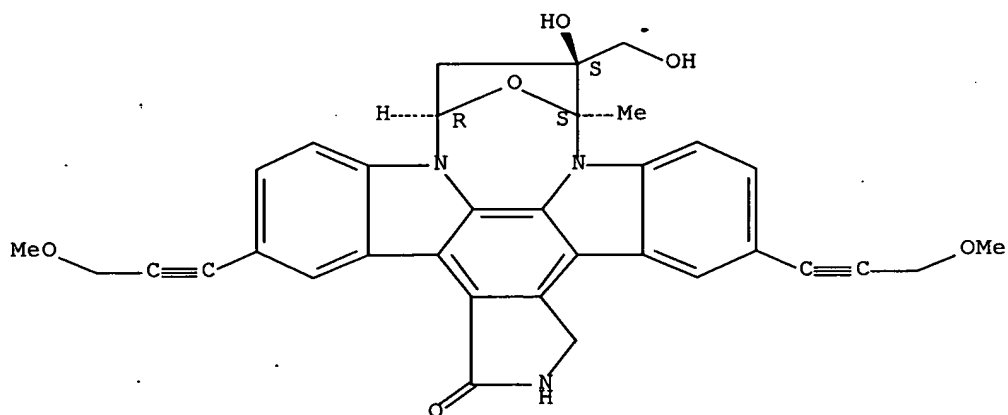
Absolute stereochemistry.



RN 200635-27-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocin-1-one, 2,3,9,10,11,12-hexahydro-10-hydroxy-10-(hydroxymethyl)-5,16-bis(3-methoxy-1-propynyl)-9-methyl-, (9S,10S,12R)-(9CI) (CA INDEX NAME)

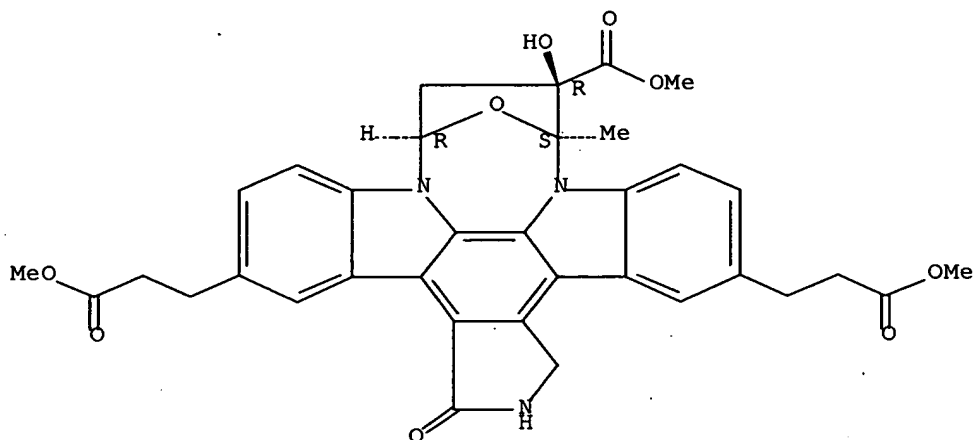
Absolute stereochemistry.



RN 200635-31-0 CAPLUS

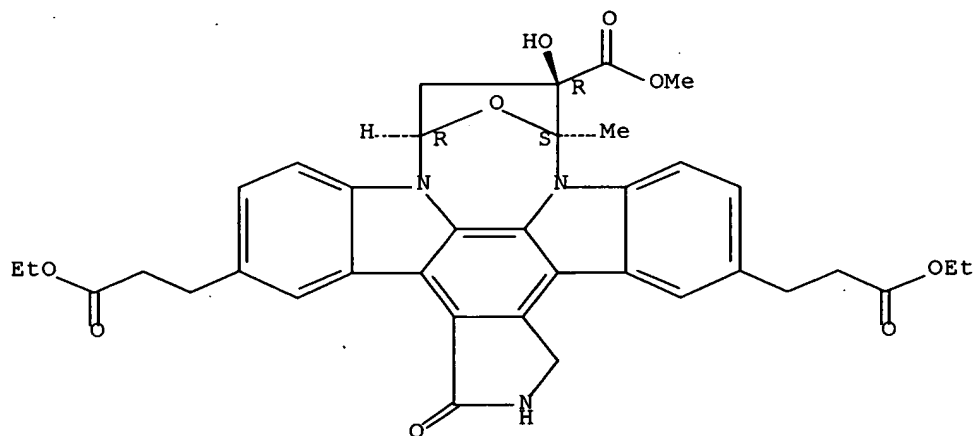
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-5,16-dipropanoic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-10-(methoxycarbonyl)-9-methyl-1-oxo-, dimethyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



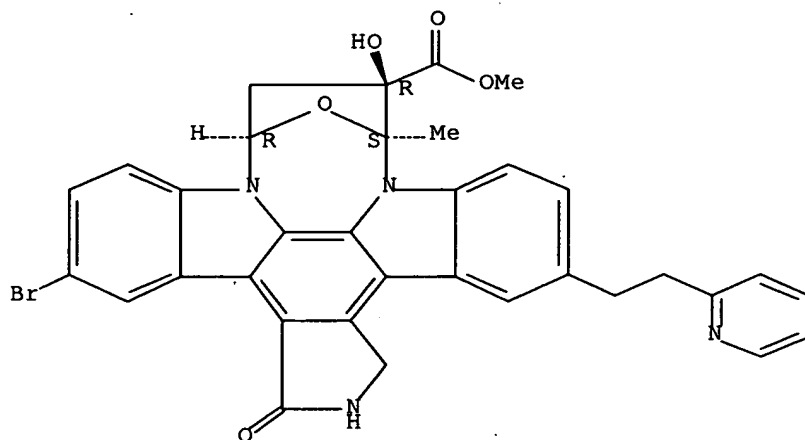
RN 200635-35-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-5,16-dipropionic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-10-(methoxycarbonyl)-9-methyl-1-oxo-, diethyl ester, (9S,10R,12R)-
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200635-50-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-bromo-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

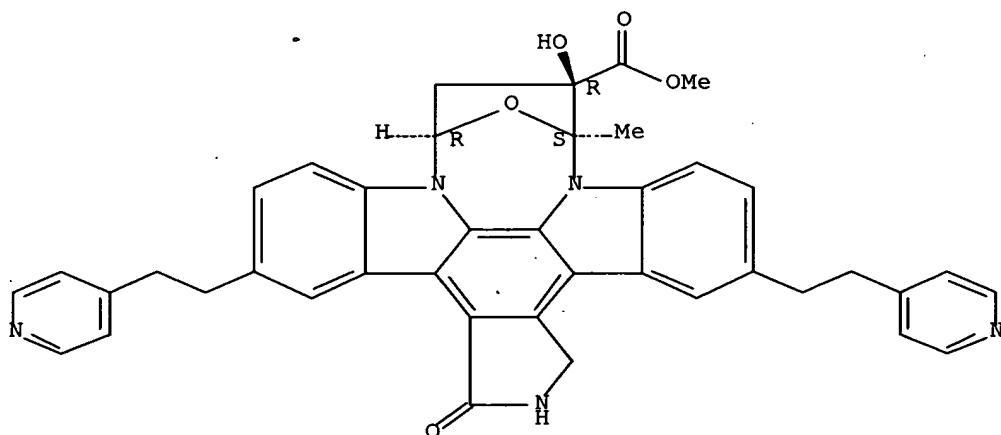
Absolute stereochemistry.



RN 200635-62-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[2-(4-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

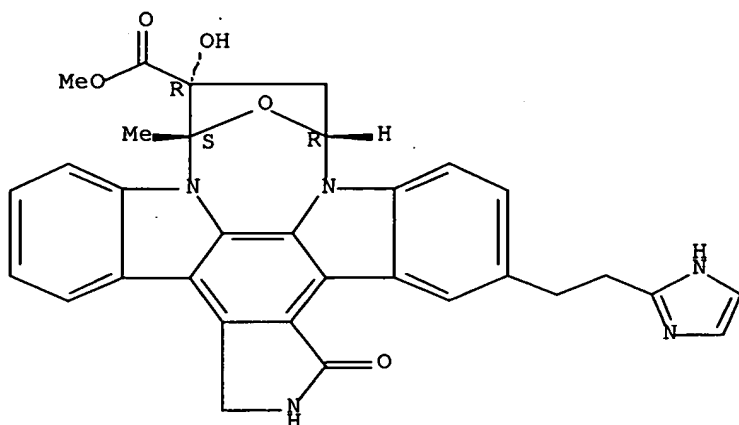
Absolute stereochemistry.



RN 200635-78-5 CAPLUS

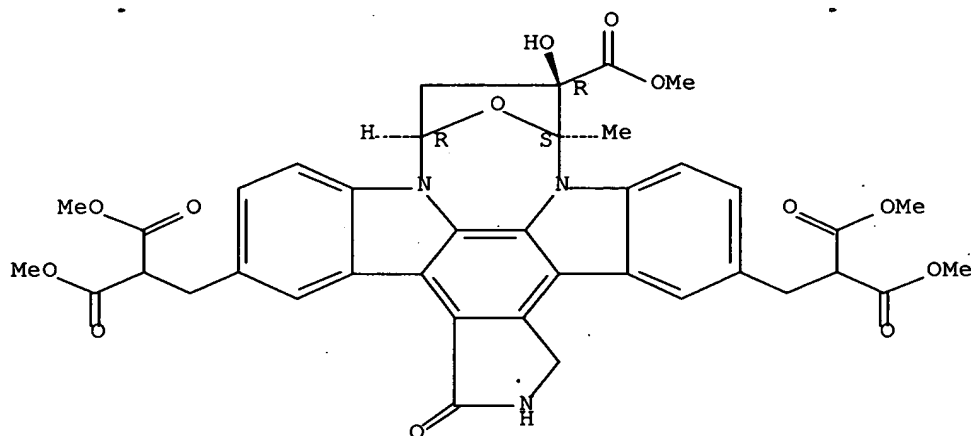
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-16-[2-(1H-imidazol-2-yl)ethyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



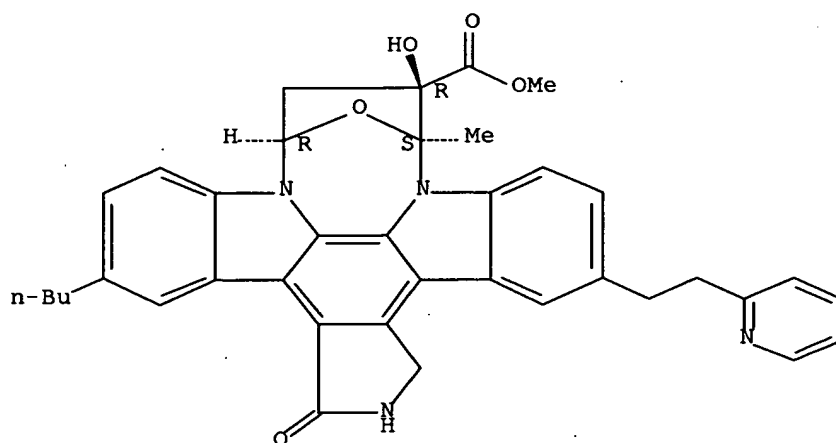
RN, 200635-96-7 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-5,16-dipropanoic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-.alpha.,.alpha.',10-tris(methoxycarbonyl)-9-methyl-1-oxo-, dimethyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200636-00-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-butyl-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

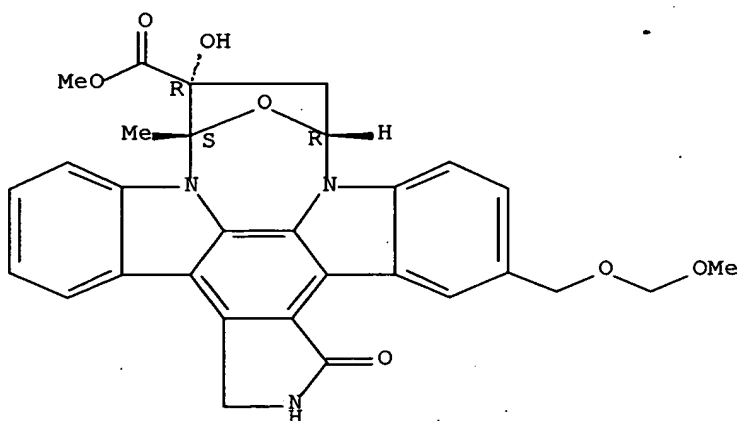
Absolute stereochemistry.



RN 200636-03-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-16-[(methoxymethoxy)methyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

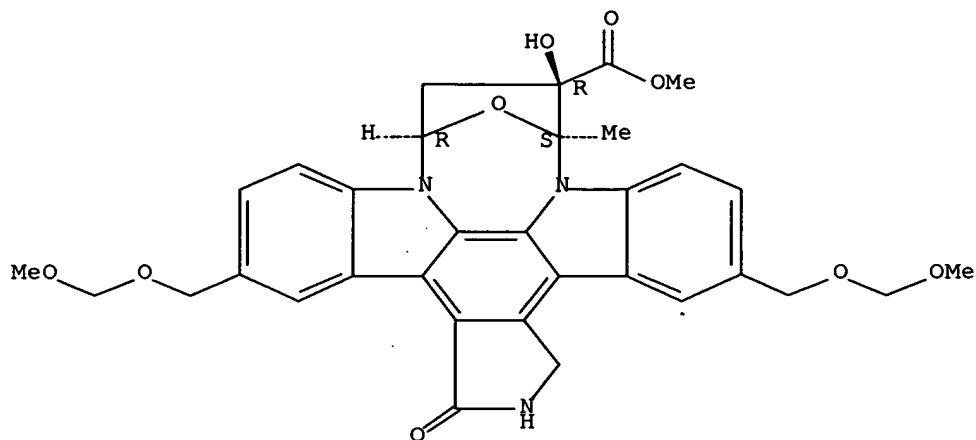
Absolute stereochemistry.



RN 200636-09-5 CAPLUS

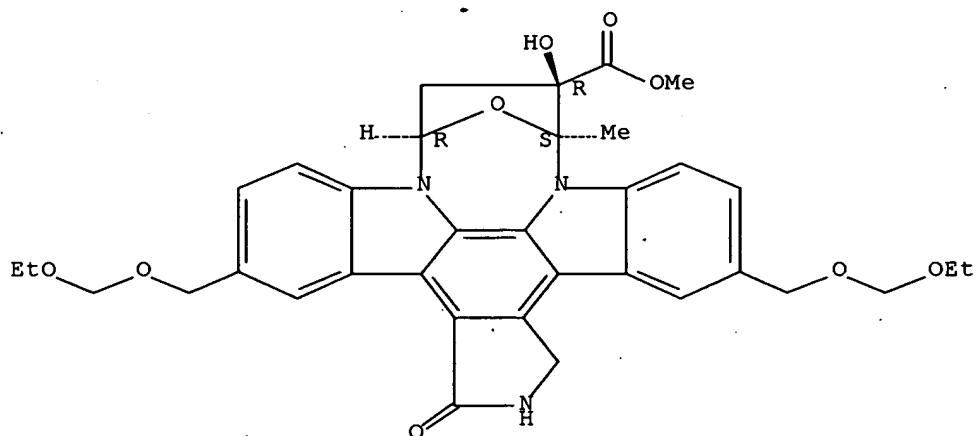
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis[(methoxymethoxy)methyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



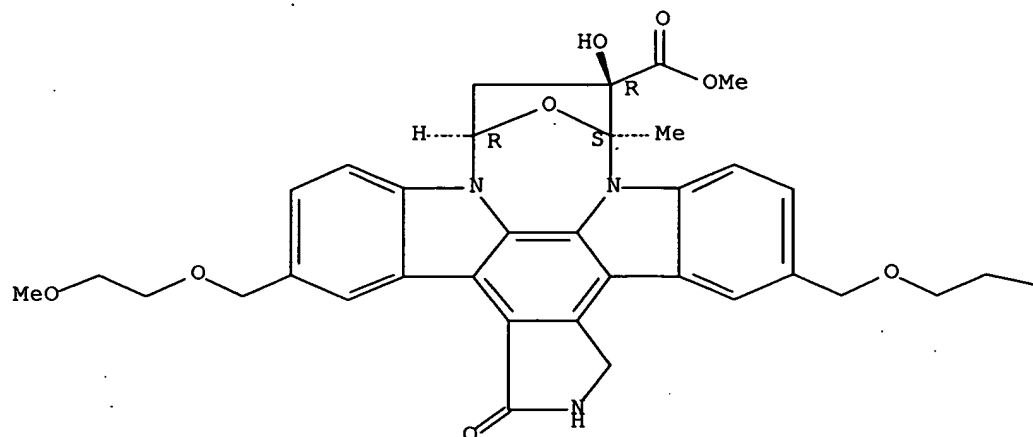
RN 200636-14-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethoxymethoxy)methyl]-
 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200636-21-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis[(2-methoxyethoxy)methyl]-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

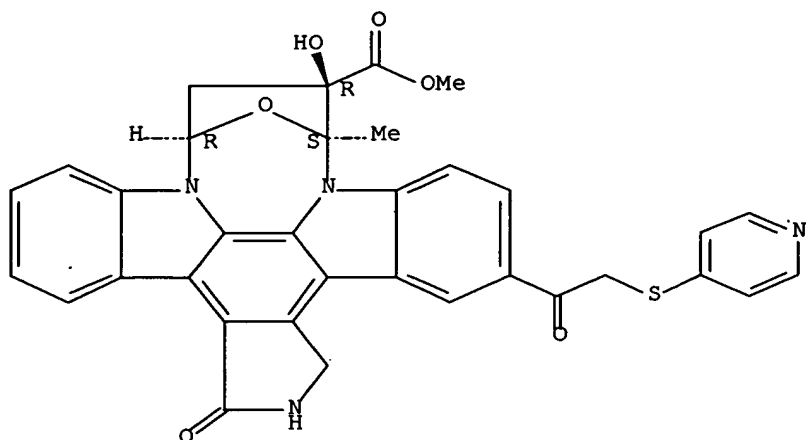
Absolute stereochemistry.



—OMe

RN 200637-38-3 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[(4-pyridinylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

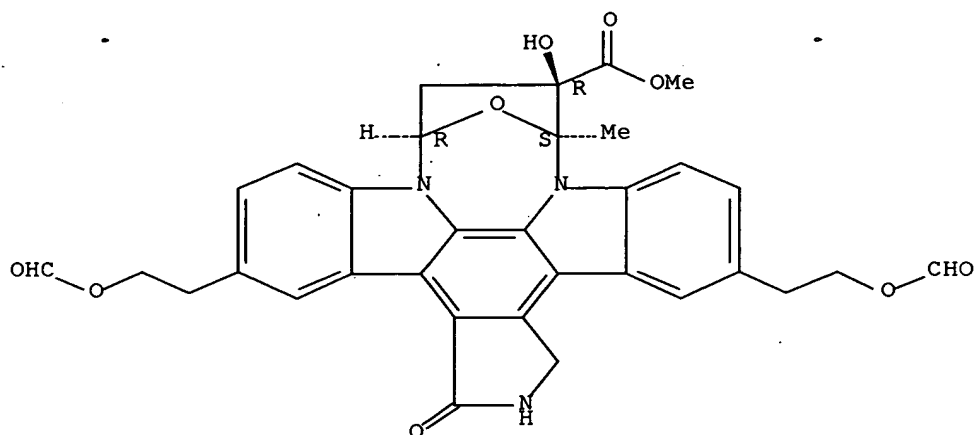
Absolute stereochemistry.



RN 200637-39-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[2-(formyloxy)ethyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

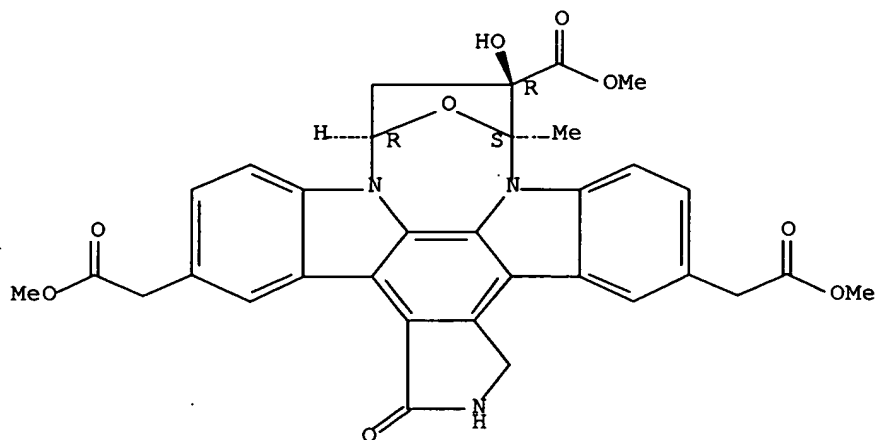
Absolute stereochemistry.



RN 200637-40-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-5,16-diacetic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-10-(methoxycarbonyl)-9-methyl-1-oxo-, dimethyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

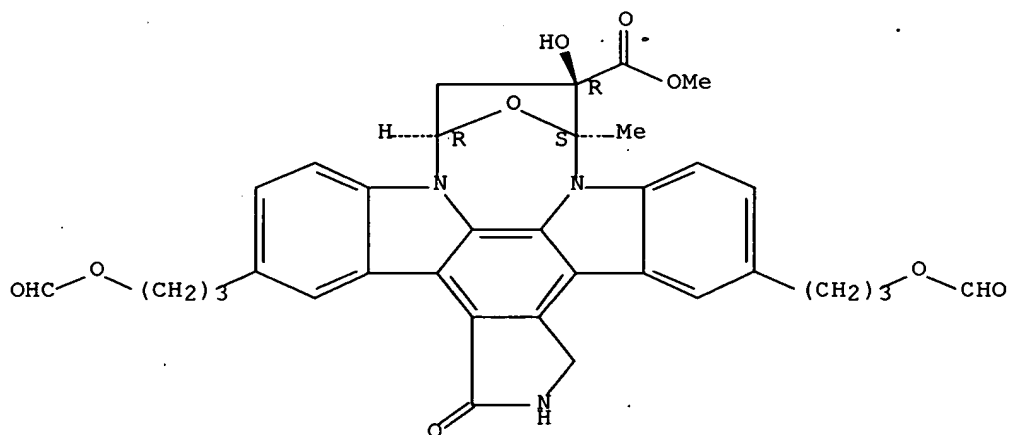
Absolute stereochemistry.



RN 200637-41-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[3-(formyloxy)propyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

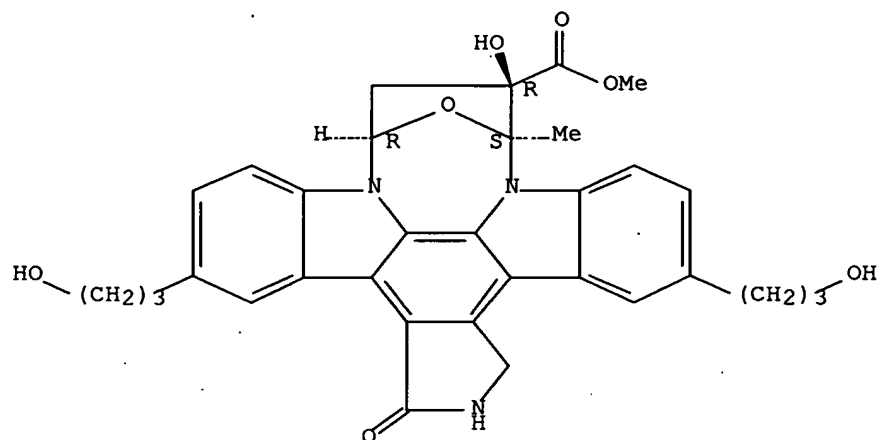
Absolute stereochemistry.



RN 200637-42-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(3-hydroxypropyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

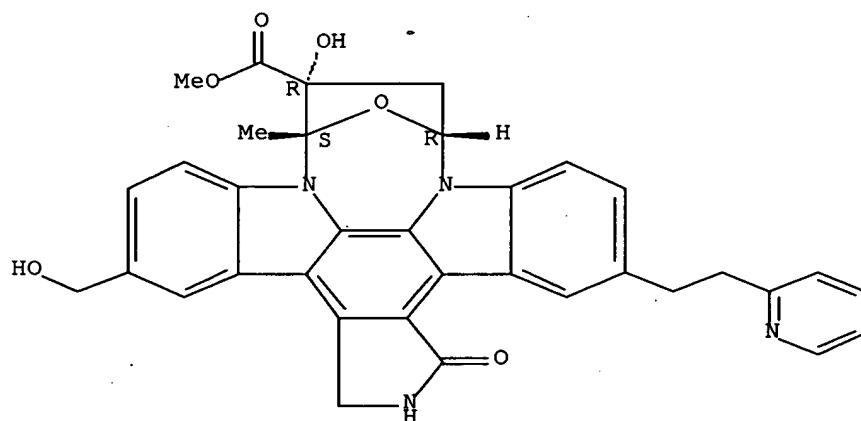
Absolute stereochemistry.



RN 200637-44-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-16-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

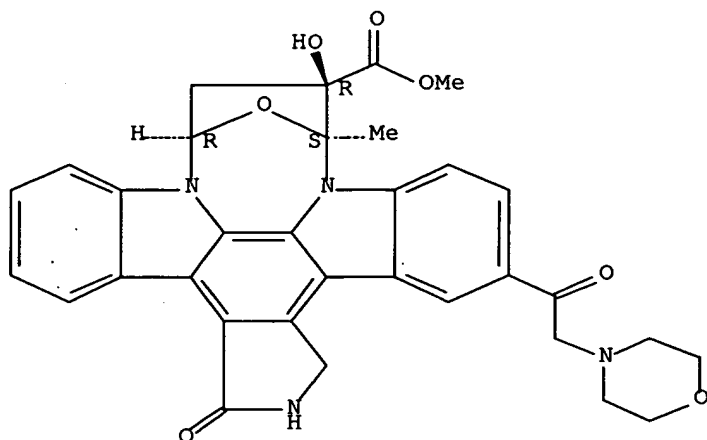
Absolute stereochemistry.



RN 200637-45-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5-(4-morpholinylacetyl)-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

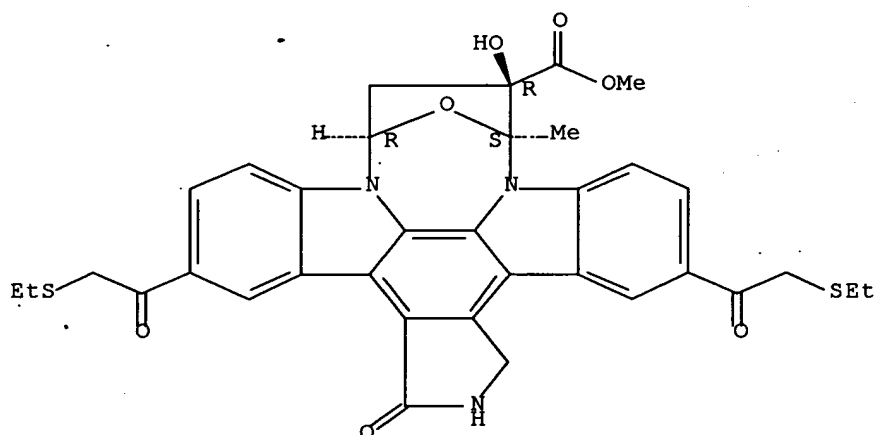
Absolute stereochemistry.



RN 367527-04-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)acetyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

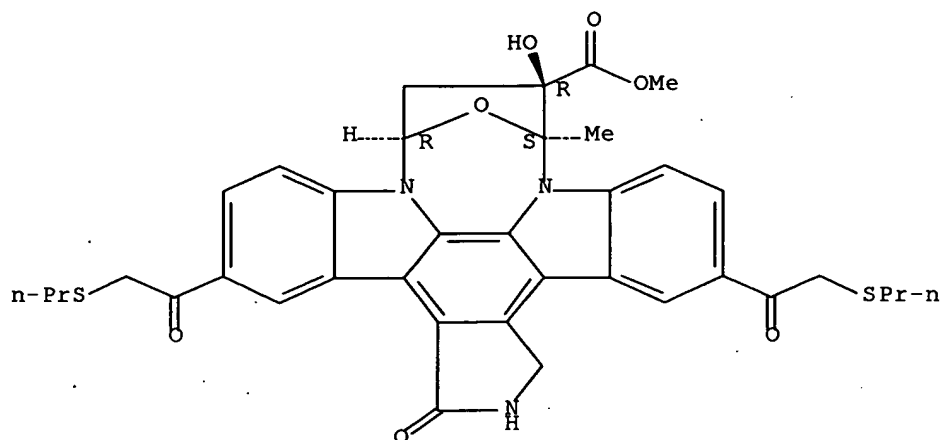
Absolute stereochemistry.



RN 367527-05-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(propylthio)acetyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

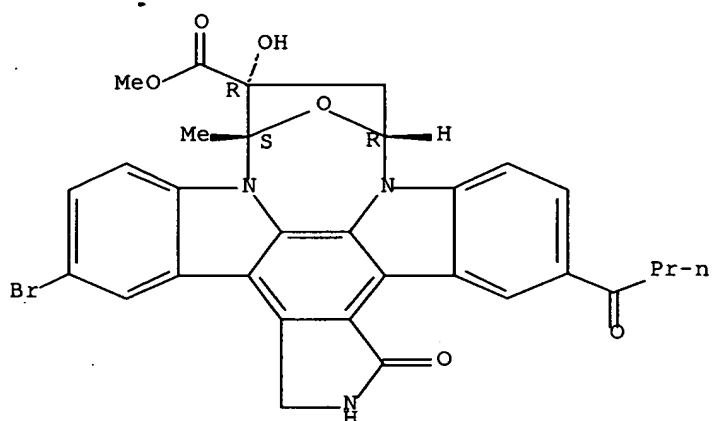
Absolute stereochemistry.



RN 367527-07-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-bromo-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-(1-oxobutyl)-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

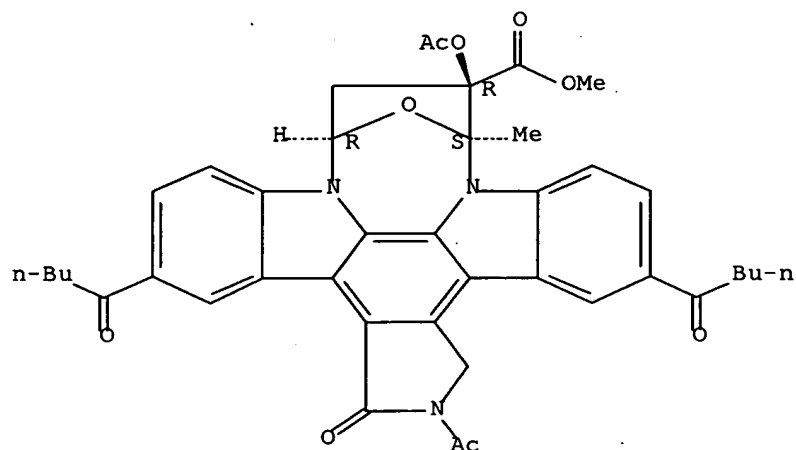
Absolute stereochemistry.



RN 367527-08-0 CAPLUS

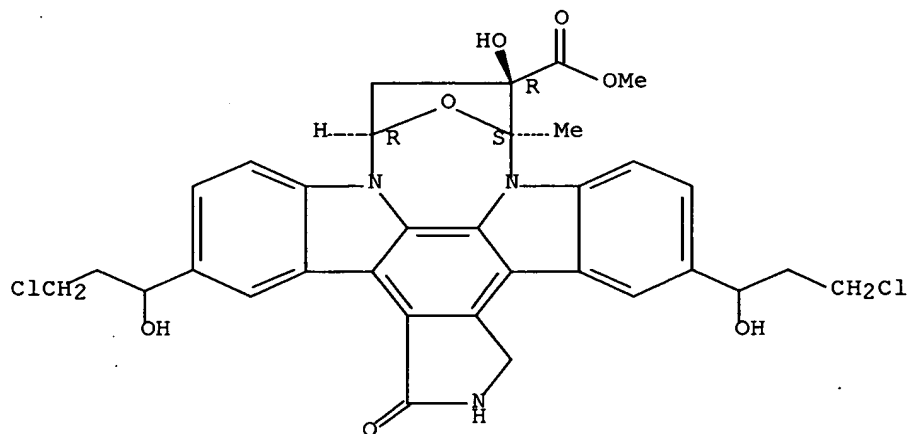
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5,16-bis(1-oxopentyl)-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 367527-09-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis(3-chloro-1-hydroxypropyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

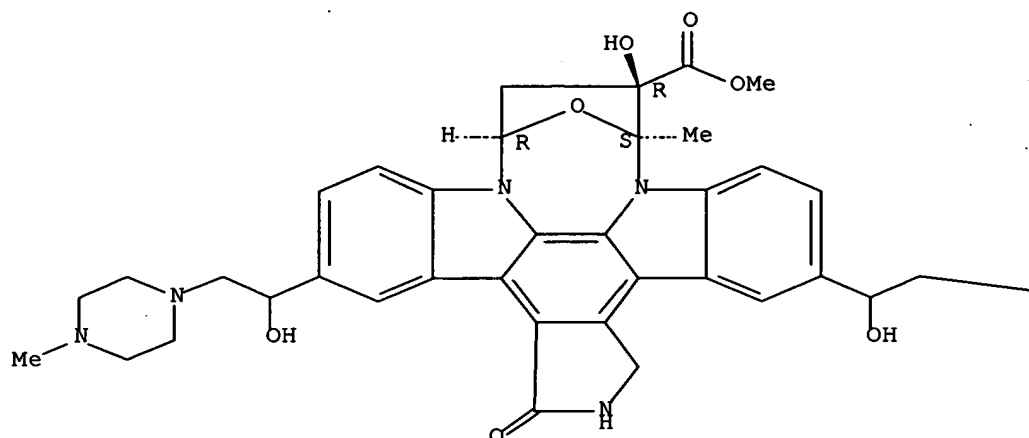
Absolute stereochemistry.



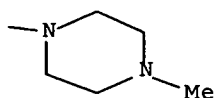
RN 367527-10-4 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis[1-hydroxy-2-(4-methyl-1-piperazinyl)ethyl]-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



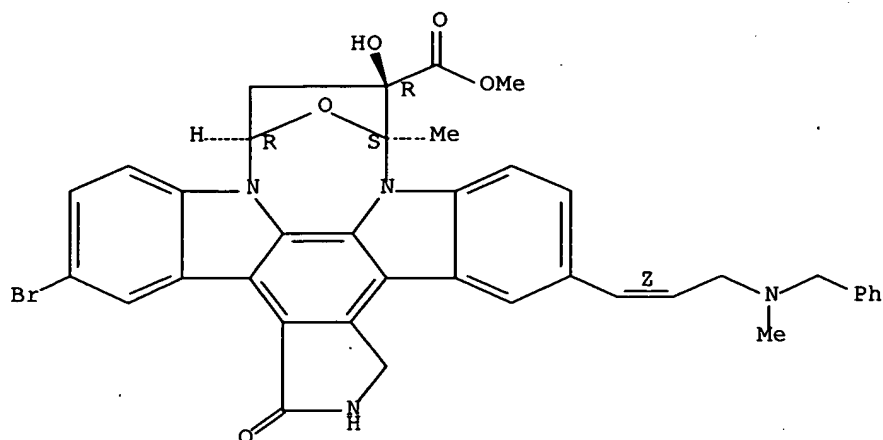
PAGE 1-B



RN 367527-11-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-bromo-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-16-[(1Z)-3-[methyl(phenylmethyl)amino]-1-propenyl]-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

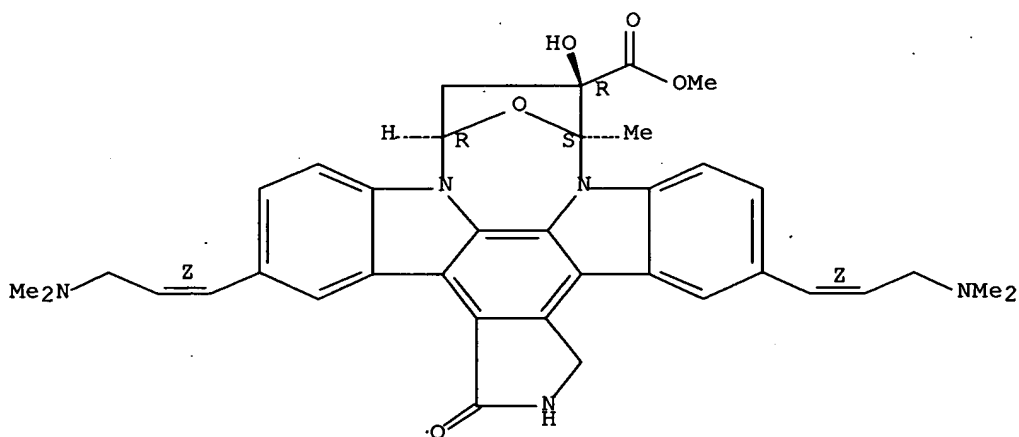
Absolute stereochemistry.
Double bond geometry as shown.



RN 367527-13-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(1Z)-3-(dimethylamino)-1-propenyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

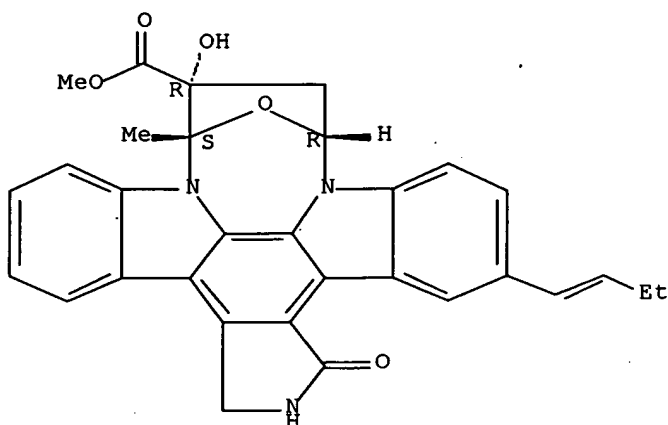
Absolute stereochemistry.
Double bond geometry as shown.



RN 367527-15-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-(1-butenyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

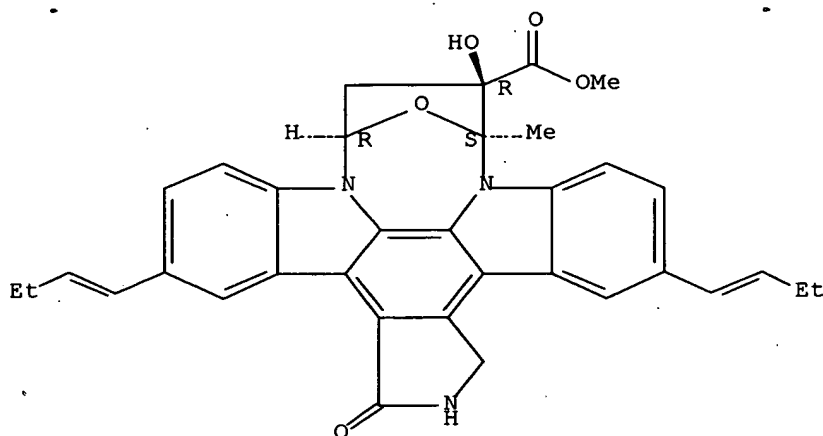


RN 367527-17-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis(1-butenyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

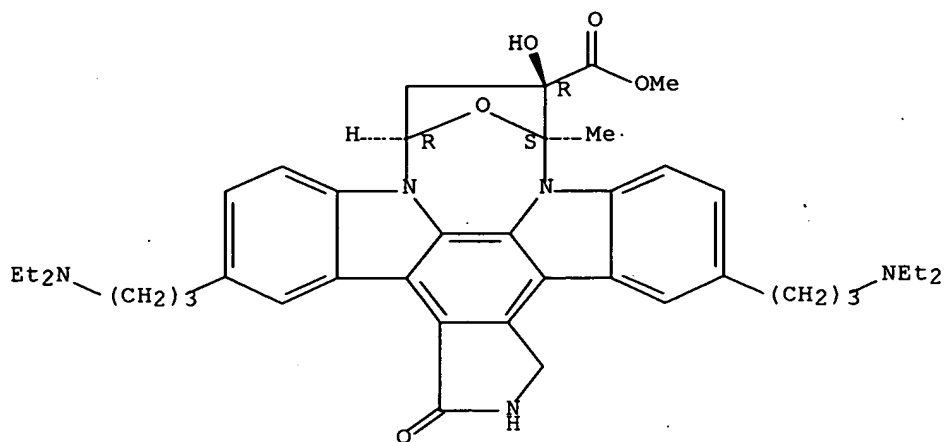
Double bond geometry unknown.



RN 367527-31-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[3-(diethylamino)propyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

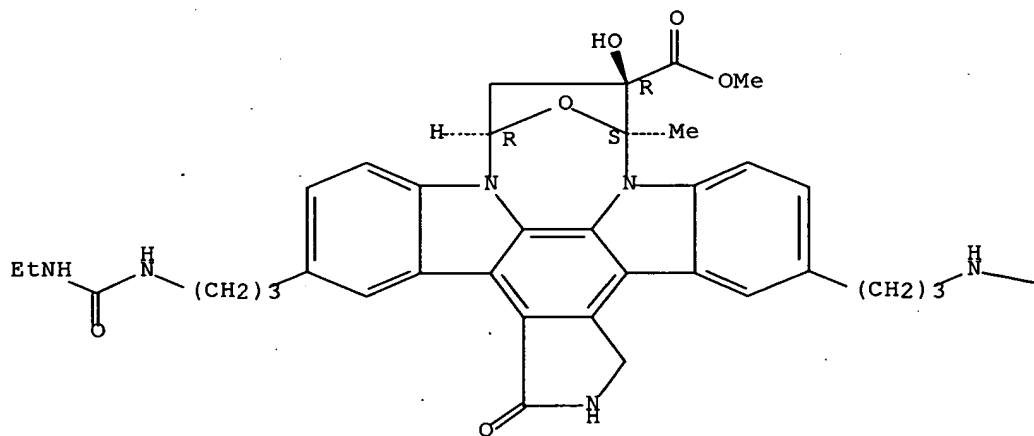


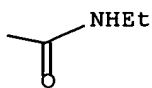
RN 367527-32-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[3-
 [(ethylamino)carbonyl]amino]propyl]-2,3,9,10,11,12-hexahydro-10-
 hydroxy-9-
 methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

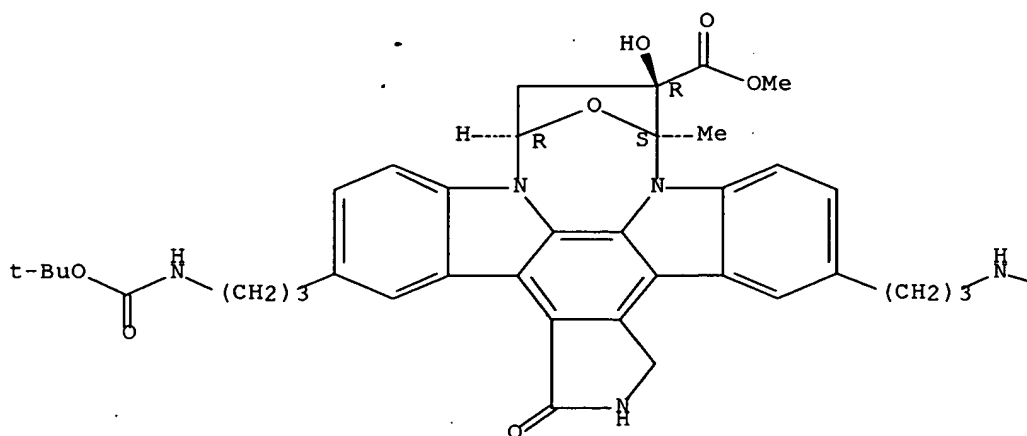
PAGE 1-A

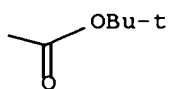




RN 367527-33-1 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[3-[(1,1-dimethylethoxy)carbonyl]amino]propyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

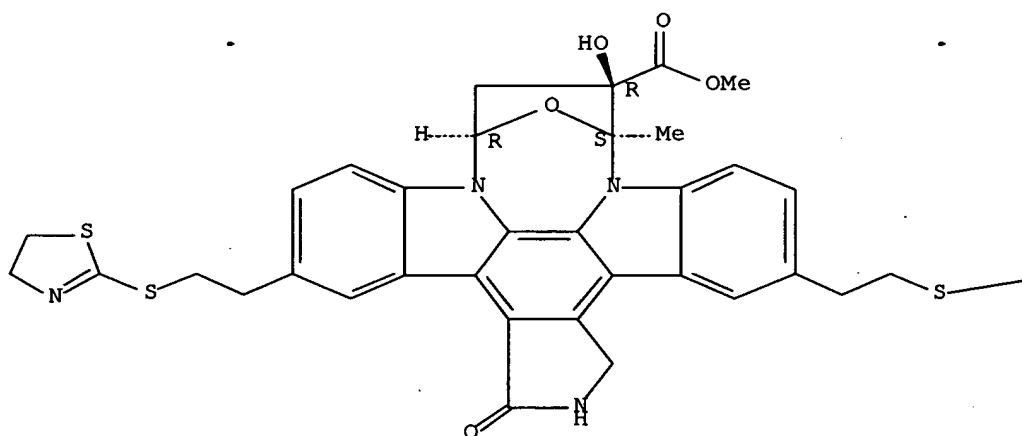


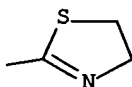


RN 367527-35-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[2-[(4,5-dihydro-2-thiazolyl)thio]ethyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.





IT 118777-30-3 118777-58-5 118777-59-6
 118777-60-9 121664-78-6 156177-91-2
 178404-44-9 200637-48-5

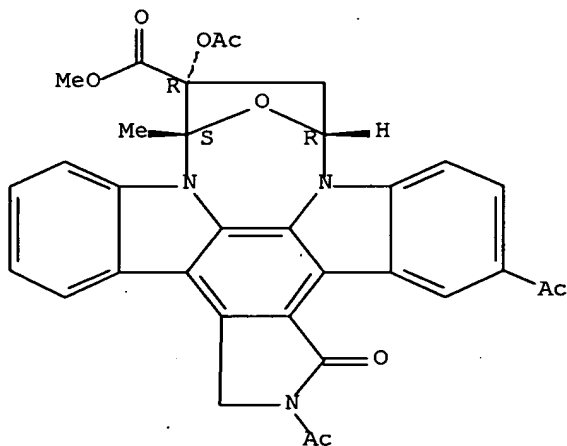
RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of derivs. of the alkaloid K-252a for pharmaceutical use in
 the treatment of neurol. disorders)

RN 118777-30-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
 i][1,6]benzodiazocine-10-carboxylic acid, 2,16-diacetyl-10-(acetyloxy)-
 2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-
 (9CI) (CA INDEX NAME)

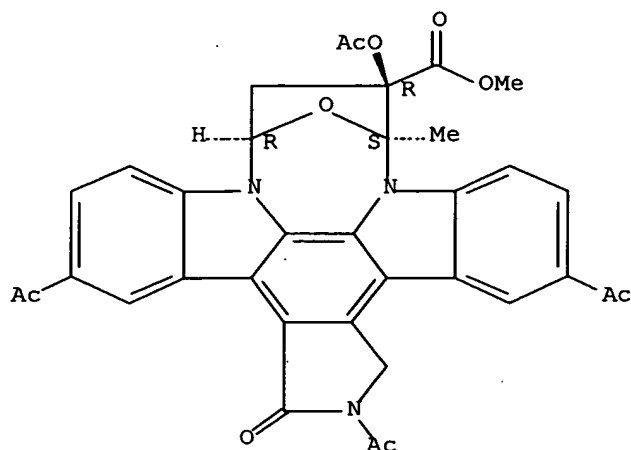
Absolute stereochemistry.



RN 118777-58-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
 i][1,6]benzodiazocine-10-carboxylic acid, 2,5,16-triacetyl-10-
 (acetyloxy)-
 2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-
 (9CI) (CA INDEX NAME)

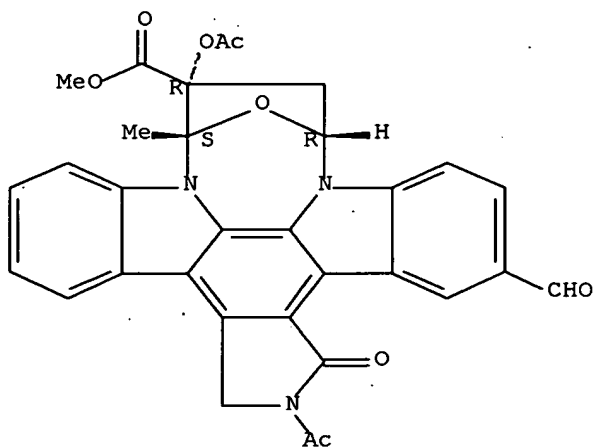
Absolute stereochemistry.



RN 118777-59-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

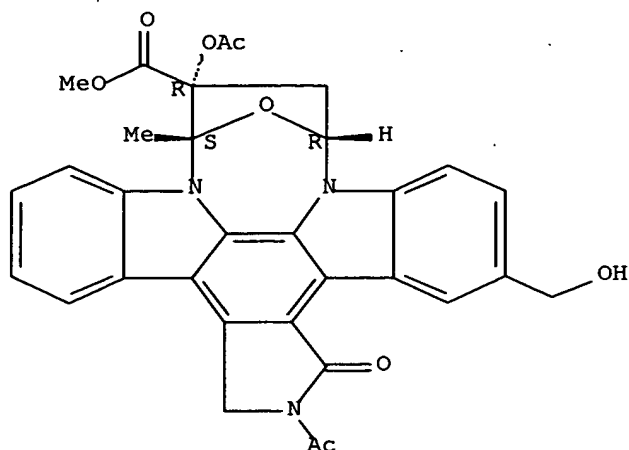
Absolute stereochemistry.



RN 118777-60-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

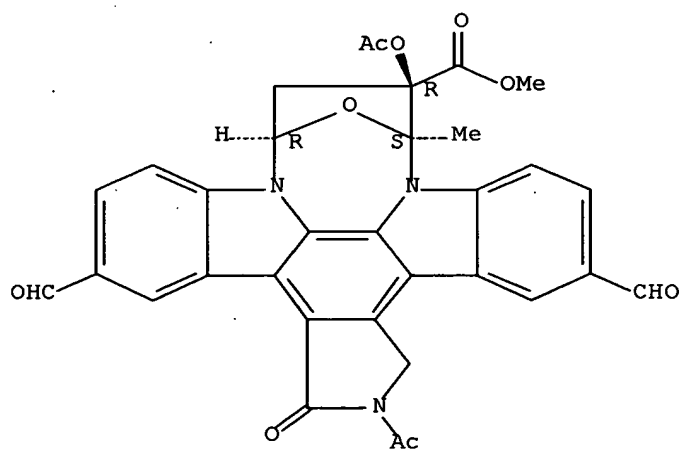
Absolute stereochemistry.



RN 121664-78-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-diformyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

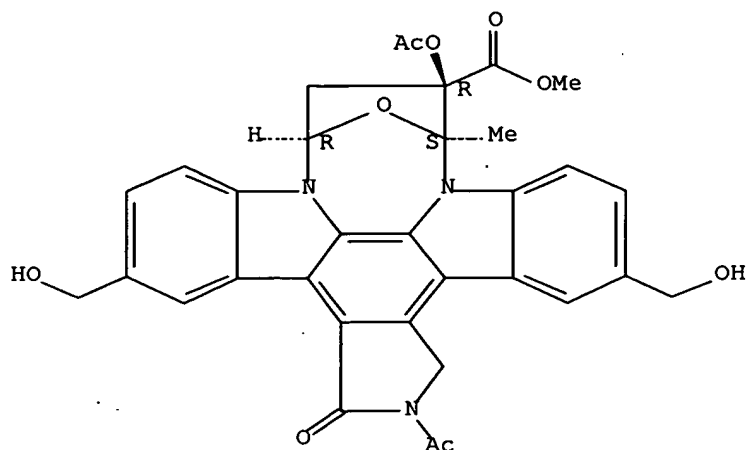
Absolute stereochemistry.



RN 156177-91-2 CAPLUS

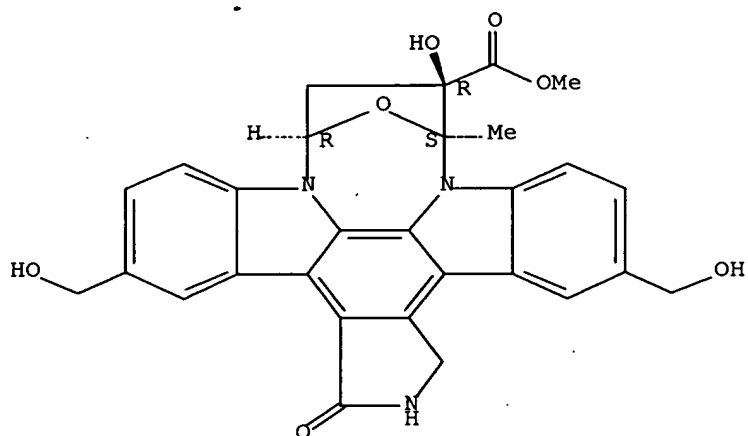
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



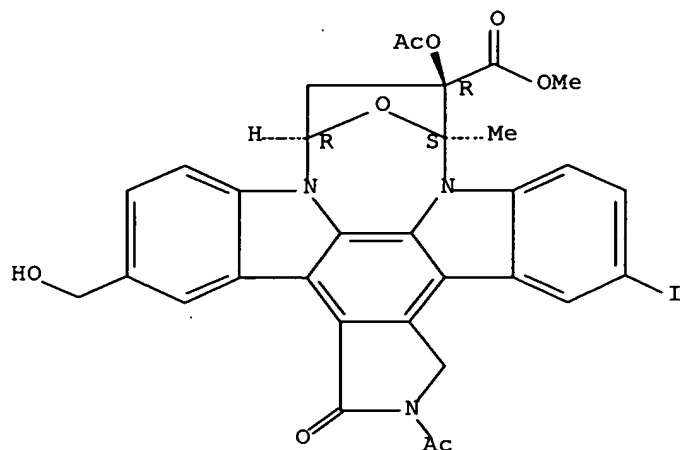
RN 178404-44-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 200637-48-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-(hydroxymethyl)-5-iodo-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 200637-29-2P 200637-31-6P 200637-32-7P

367527-51-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

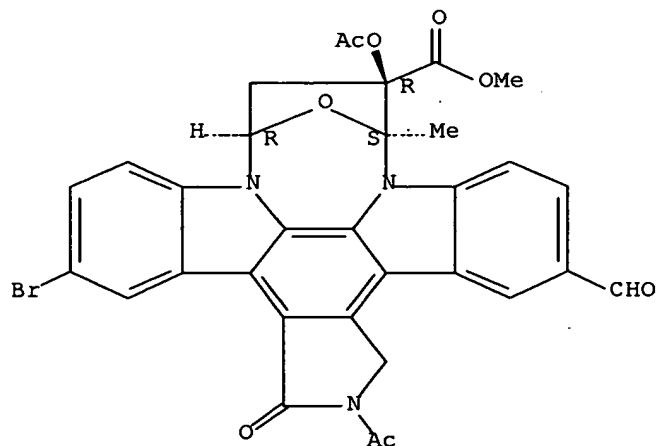
(Reactant or reagent)

(prepn. of derivs. of the alkaloid K-252a for pharmaceutical use in the treatment of neurol. disorders)

RN 200637-29-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-bromo-5-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

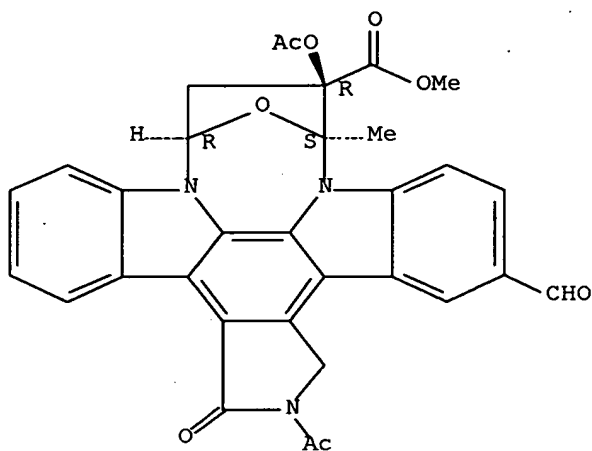


RN 200637-31-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-formyl-

2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

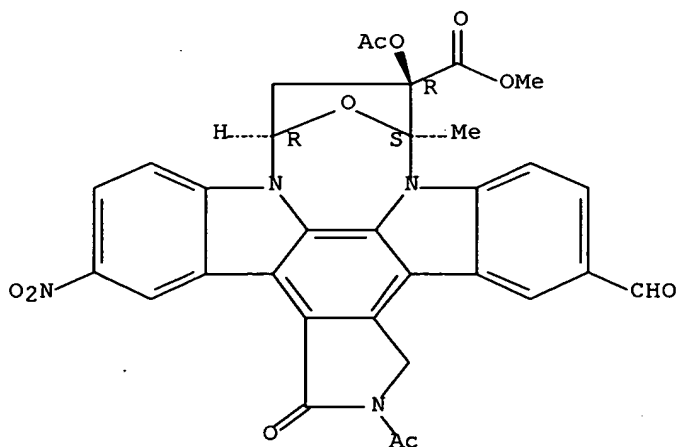


RN 200637-32-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-formyl-

2,3,9,10,11,12-hexahydro-9-methyl-16-nitro-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

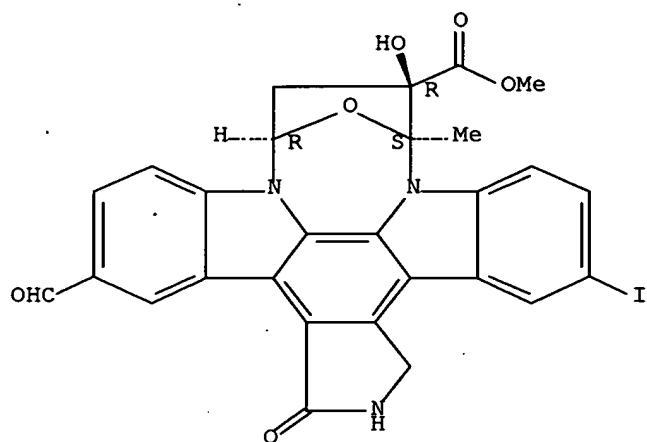
Absolute stereochemistry.



RN 367527-51-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-formyl-2,3,9,10,11,12-hexahydro-10-hydroxy-5-iodo-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 90 THERE ARE 90 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 1 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2003:153388 CAPLUS
 DN 138:198569
 TI Use of kinase-inhibiting agents for prophylaxis and/or therapy of viral diseases, and system for identification of such agents
 IN Ludwig, Stephan; Planz, Oliver; Sedlacek, Hans-Harald; Pleschka, Stephan
 PA Medinnova Gesellschaft fur Medizinische Innovationen aus Akademischer Forschung mbH, Germany
 SO Ger. Offen., 10 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----|--|------|----------|------------------|----------|
| PI | DE 10138912 | A1 | 20030227 | DE 2001-10138912 | 20010808 |
| | WO 2003015689 | A2 | 20030227 | WO 2002-DE2810 | 20020726 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |

PRAI DE 2001-10138912 A 20010808

AB The invention discloses the use of at least one, preferably two, active substance(s) for the prophylaxis and/or therapy of at least one viral disease, characterized in that the active substance(s) inhibit either a signal transduction pathway-assocd. kinase such that virus replication

is essentially inhibited or a SEK kinase.

IT 156177-65-0, CEP 1347

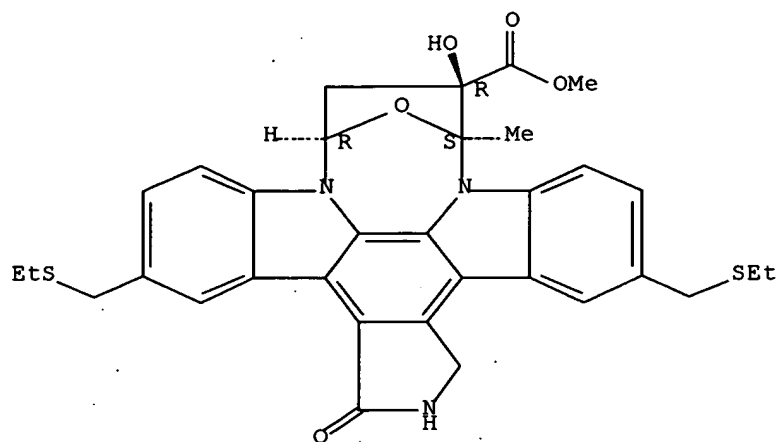
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(kinase-inhibiting agents for prophylaxis and/or therapy of viral diseases, and system for identification of such agents)

RN 156177-65-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:888538 CAPLUS
 DN 137:363091
 TI Pyrrolocarbazoles for the treatment and prevention of pain
 IN Aimone, Lisa D.; Hudkins, Robert L.; Miller, Mathew S.
 PA Cephalon, Inc., USA
 SO PCT Int. Appl.; 68 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 2002092065 | A2 | 20021121 | WO 2002-US15667 | 20020516 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | US 2003087899 | A1 | 20030508 | US 2002-146680 | 20020515 |
| PRAI | US 2001-291227P | P | 20010516 | | |
| | US 2002-146680 | A | 20020515 | | |

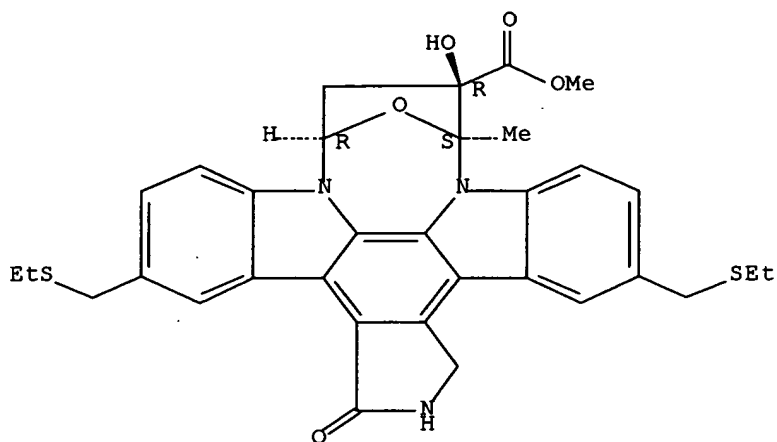
OS MARPAT 137:363091
 AB Novel methods for the treatment and/or prevention of pain are presented. The methods may comprise administering to a subject in need thereof an effective amt. of a stress-activated protein kinase inhibitor.

Preferred compds. for use in the methods include fused pyrrolocarbazole compds. Thus, a pyrrolocarbazole deriv. was administered at s.c. at doses of 1.0 mg/kg in 30% Solutol 24 h prior to the formalin challenge. The compd. demonstrated activity for the prevention and/or treatment of pain according to the formalin model and a decrease in the flinching/shaking responses of about 15% in phase I and about 30% in phase II. was obsd.

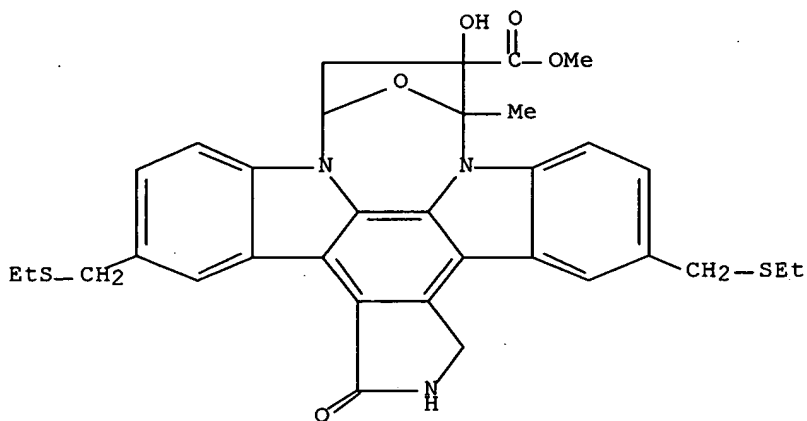
IT **156177-65-0 263554-49-0**
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (pyrrolocarbazoles for treatment and prevention of pain)

RN 156177-65-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 263554-49-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester (9CI)
 (CA INDEX NAME)



L7 ANSWER 3 OF 54 CAPLUS COPYRIGHT 2003 ACS
AN 2002:749210 CAPLUS
DN 137:309328
TI Mixed lineage kinase 3 mediates gp120IIIB-induced neurotoxicity
AU Bodner, Amos; Maroney, Anna C.; Finn, James P.; Ghadge, Ghanashyam;
Roos,

Raymond; Miller, Richard J.

CS Department of Molecular Pharmacology and Biological Chemistry,
Northwestern University, Chicago, IL, 60611, USA

SO Journal of Neurochemistry (2002), 82(6), 1424-1434
CODEN: JONRA9; ISSN: 0022-3042

PB Blackwell Science Ltd.

DT Journal

LA English

AB Overexpression of gp120, the major coat protein of the HIV-1 virus, in central glial cells, or treatment of neurons with gp120 in culture, produces apoptotic neuronal death. Here the authors demonstrate that CEP-1347 (KT7515), an inhibitor of mixed lineage kinase 3 (MLK3), an upstream activator of JNK, inhibits gp120IIIB-induced apoptosis of hippocampal neurons. Furthermore, expression of wild type MLK3 in hippocampal pyramidal neurons enhanced gp120IIIB-induced neurotoxicity, whereas expression of a dominant neg. MLK3 protected neurons from the toxic effects of the glycoprotein. These results indicate a role for

MLK3 signaling in gp120IIIB-induced neuronal death, and suggest potential clin.

utility of CEP-1347 in inhibiting the progression of AIDS dementia.

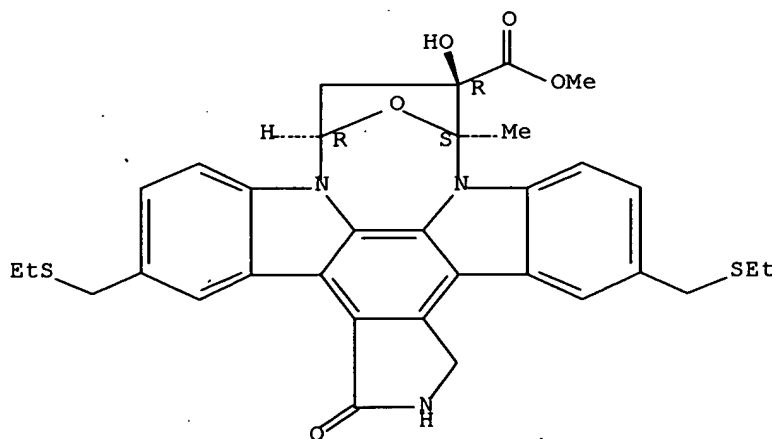
IT 156177-65-0, CEP-1347

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(mixed lineage kinase 3 mediates gp120IIIB-induced neurotoxicity)

RN 156177-65-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

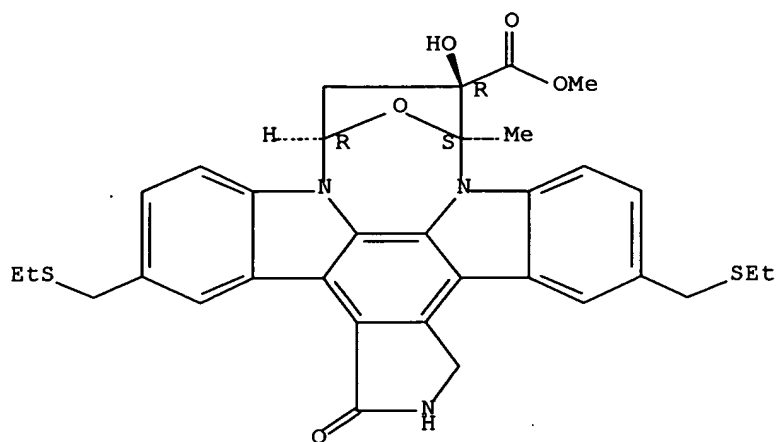
Absolute stereochemistry.



RE.CNT 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:438459 CAPLUS
 DN 138:117597
 TI Blockade of c-Jun N-terminal kinase pathway attenuates gentamicin-induced cochlear and vestibular hair cell death
 AU Ylikoski, Jukka; Liang, Xing-Qun; Virkkala, Jussi; Pirvola, Ulla
 CS Institute of Biotechnology, University of Helsinki, Helsinki, 00014, Finland
 SO Hearing Research (2002), 166(1-2), 33-43
 CODEN: HERED3; ISSN: 0378-5955
 PB Elsevier Science B.V.
 DT Journal
 LA English
 AB The ototoxic action of aminoglycoside antibiotics leading to the loss of inner ear hair cells is well documented. However, the mol. mechanisms are poorly defined. We have previously shown that in neomycin-exposed cochlear organotypic cultures, the c-Jun N-terminal kinase (JNK) pathway assocd. with stress, injury and apoptosis - is activated in hair cells. We have shown that hair cell death can be attenuated by CEP-1347, an inhibitor of JNK signaling. In the present study, we demonstrate that gentamicin-induced ototoxicity leads to JNK activation and apoptosis in the inner ear hair cells in vivo. We show that systemic administration of CEP-1347 attenuates gentamicin-induced decrease of auditory sensitivity and cochlear hair cell damage. In addn., CEP-1347 treatment reduces the extent of hair cell loss in the ampullary cristae after gentamicin intoxication. Particularly, the inner hair cells of the cochlea and type I hair cells of the vestibular organs are protected. Our previous data have shown that also acoustic overstimulation can cause apoptotic death of cochlear hair cells and that CEP-1347 can attenuate noise-induced hair cell loss. Thus, our results imply that activation of JNK cascade may be a common mol. outcome of cellular stress in the inner ear sensory epithelia and that attenuation of the lesion can be provided by inhibiting JNK activation.
 IT 156177-65-0, CEP-1347
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (blockade of JNK pathway attenuates gentamicin-induced cochlear and vestibular hair cell death)
 RN 156177-65-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

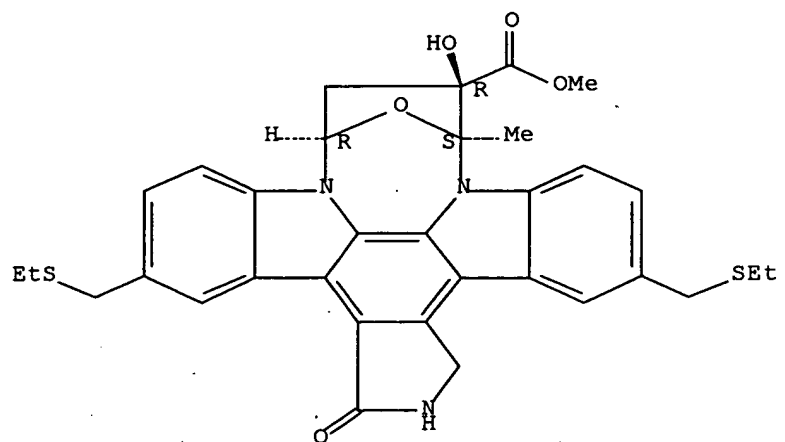
Absolute stereochemistry.



RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:394536 CAPLUS
 DN 137:304091
 TI Mixed lineage kinase family, potential targets for preventing neurodegeneration
 AU Maroney, Anna C.; Saporito, Michael S.; Hudkins, Robert L.
 CS Cephalon Inc., West Chester, PA, 19380, USA
 SO Current Medicinal Chemistry: Central Nervous System Agents (2002), 2(2), 143-155
 CODEN: CMCCCO; ISSN: 1568-0150
 PB Bentham Science Publishers Ltd.
 DT Journal; General Review
 LA English
 AB A review. The c-Jun amino terminal kinase (JNK) cascade leading to c-Jun phosphorylation has been implicated in the neuronal cellular response to a variety of external stimuli including free radical oxidative stress, trophic withdrawal, amyloid toxicity and activation by death domain receptor ligands. Although the exact causes of neuronal loss in neurodegenerative diseases remain unknown, it has been hypothesized that response to these environmental stresses may be contributing factors. Agents which block the JNK signaling cascade have been proposed as a therapeutic approach for preventing neuronal cell death obsd. in a variety of neurodegenerative diseases including Parkinson's, Huntington's, and Alzheimer's disease. The JNKs are regulated through a sequential signaling cascade by a series of upstream kinases including the mixed lineage kinases (MLKs). Herein, we review the MLK family as a therapeutic target and provide evidence with CEP-1347, the most advanced MLK inhibitor currently in clin. trails for Parkinson's disease, that intervention at the MLK point in the JNK cascade may reduce the susceptibility of neurons to degenerate.
 IT 156177-65-0, CEP-1347
 RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (mixed lineage kinase family, potential targets for preventing neurodegeneration)
 RN 156177-65-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 95 THERE ARE 95 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 54 CAPLUS COPYRIGHT 2003 ACS
AN 2002:199486 CAPLUS
DN 137:41220
TI Generic method for on-line extraction of drug substances in the presence
of biological matrices using turbulent flow chromatography
AU Herman, J. L.
CS Cephalon, Inc., West Chester, PA, 19380-4245, USA
SO Rapid Communications in Mass Spectrometry (2002), 16(5), 421-426
CODEN: RCMSEF; ISSN: 0951-4198
PB John Wiley & Sons Ltd.
DT Journal
LA English
AB The use of liq. chromatog./mass spectrometry (LC/MS) to quantify drugs
in

biol. matrixes has been well established over the last decade.

Extremely

fast LC/MS methods are commonplace in the pharmaceutical industry for
high-throughput Absorption, Distribution, Metab. and Excretion (ADME)
screening. However, to truly take full advantage of high-throughput

ADME

screening, a generic method is needed that eliminates the need to
develop

a new method for each new compd. being screened. New developments in
the

stationary phase of turbulent flow columns has allowed us to develop an
online biol. sample cleanup method that is suitable for over 99% of the
comps. in the Cephalon database.

IT 156177-65-0, CEP-1347

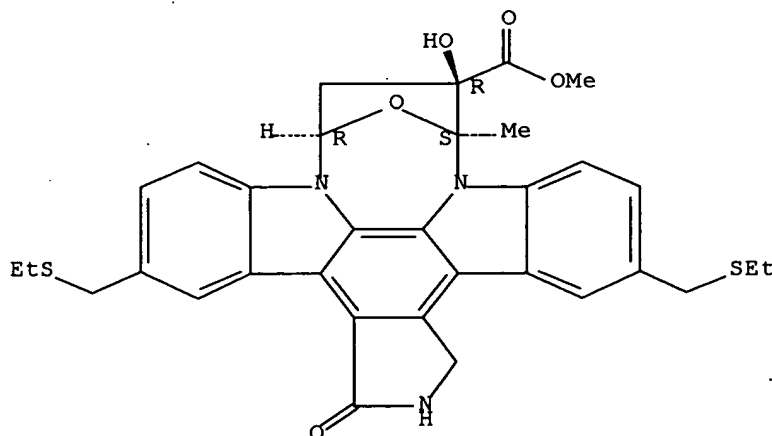
RL: ANT (Analyte); ANST (Analytical study)

(generic method for online extn. of drug substances in presence of
biol. matrixes using turbulent flow chromatog.)

RN 156177-65-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-
2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
(9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



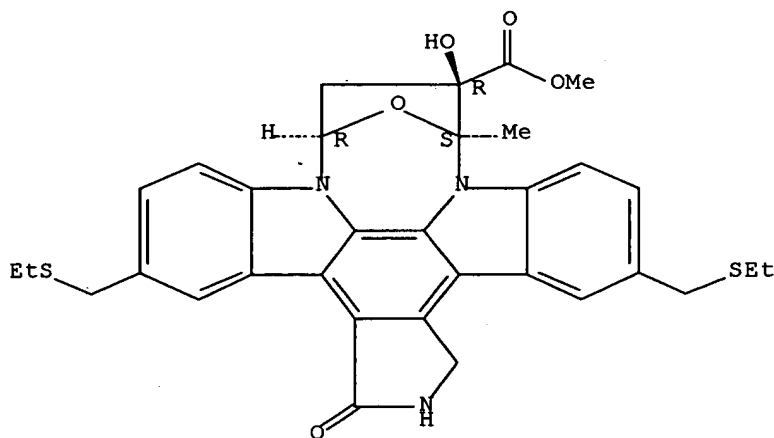
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:142907 CAPLUS
 DN 136:194260
 TI Methods for modulating multiple lineage kinase proteins and screening
 compounds which modulate multiple lineage kinase proteins
 IN Maroney, Anna; Walton, Kevin M.; Dionne, Craig A.; Neff, Nicola; Knight,
 Ernest, Jr.; Glicksman, Marcie A.
 PA Cephalon, Inc., USA
 SO PCT Int. Appl., 114 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|--|-----------------|----------|
| PI | WO 2002014536 | A2 | 20020221 | WO 2001-US24822 | 20010808 |
| | WO 2002014536 | A3 | 20030130 | | |
| | W: | | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | |
| | RW: | | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | |
| | AU 2001083179 | A5 | 20020225 | AU 2001-83179 | 20010808 |
| | EP 1309721 | A2 | 20030514 | EP 2001-961958 | 20010808 |
| | R: | | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | |
| PRAI | US 2000-637054 | A | 20000811 | | |
| | WO 2001-US24822 | W | 20010808 | | |
| OS | MARPAT 136:194260 | | | | |
| AB | Methods for identifying compds. which modulate activity of a multiple lineage kinase protein and promotes cell survival or cell death comprising the steps of contacting the cell contg. the multiple lineage protein with the compd., detg. whether the compd. decreases activity of the multiple lineage protein, and detg. whether the compd. promotes cell survival are provided. Methods for identifying compds. which may be useful in the treatment of neurodegenerative disorders and/or inflammation are also provided. Methods for modulating the activity of a multiple lineage kinase protein comprising contacting the protein or a cell contg. the protein with an indeno- or indolo-compd. of the invention are also provided. Methods of treating neurodegenerative disorders and/or inflammation are also provided. | | | | |
| IT | 156177-65-0 200633-48-3 200636-14-2 260388-68-9 RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (methods for modulating multiple lineage kinase proteins and screening compds. which modulate multiple lineage kinase proteins and treatment of neurodegenerative disorders and inflammation) | | | | |
| RN | 156177-65-0 CAPLUS | | | | |

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

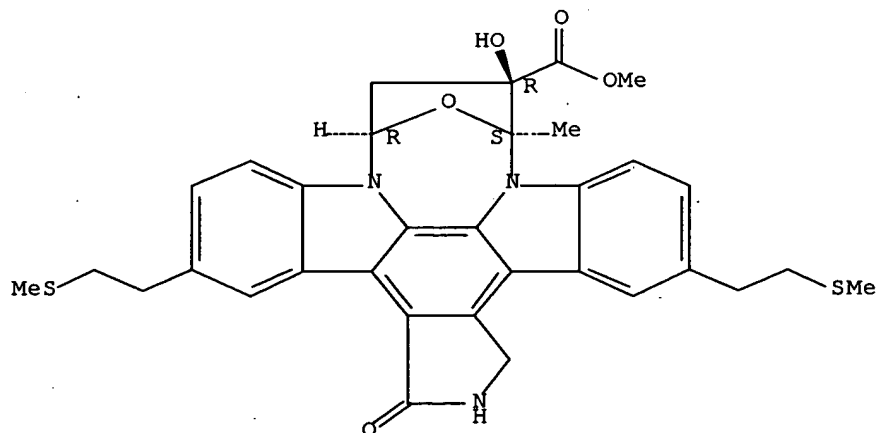
Absolute stereochemistry.



RN 200633-48-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[2-(methylthio)ethyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

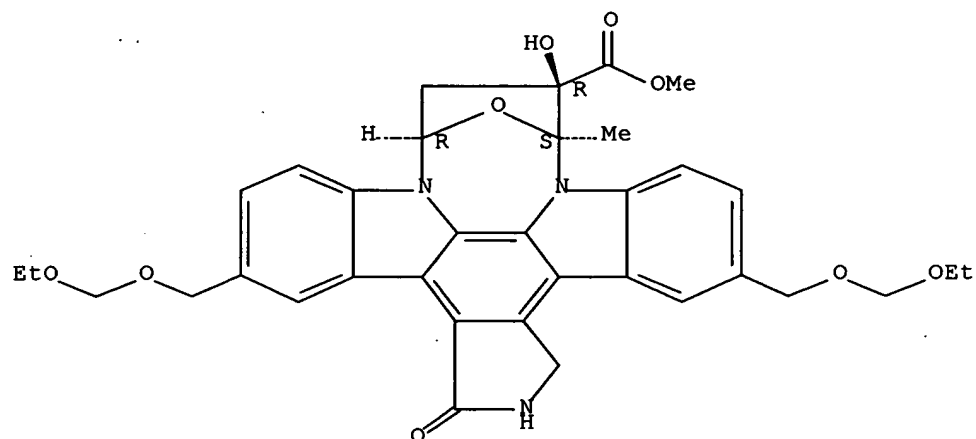
Absolute stereochemistry.



RN 200636-14-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethoxymethoxy)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

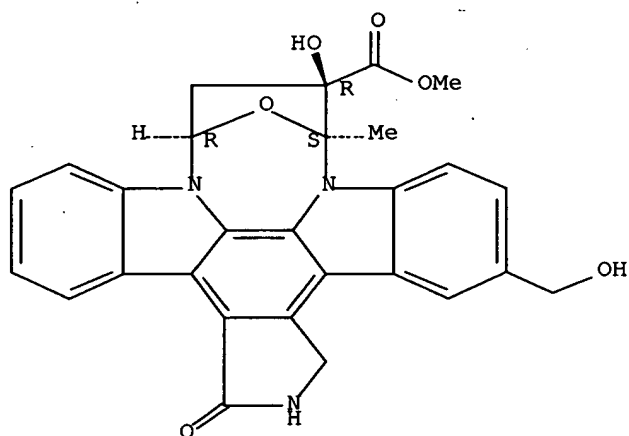
Absolute stereochemistry.



RN 260388-68-9 CAPLUS

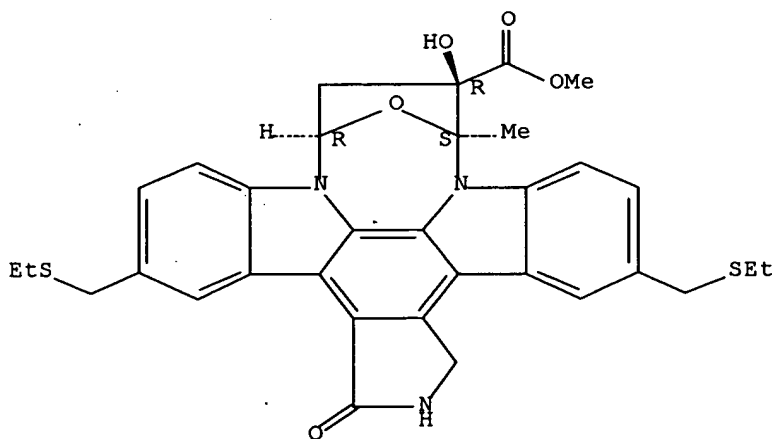
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 8 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:45909 CAPLUS
 DN 136:193542
 TI Effects of small molecule neurotrophin mimetics on neuronal survival and regeneration in culture and in vivo
 AU Harper, Sarah J.
 CS Department of Pharmacology, Neuroscience Research Centre, Harlow, Essex, UK
 SO Immunophilins in the Brain: FKBP Ligands: Novel Strategies for the Treatment of Neurodegenerative Disorders, [Proceedings from the Conference on Neuroimmunophilins], 1st, Schlangenbad, Germany, July 9-11, 1999(2000), Meeting Date 1999, 117-127. Editor(s): Gold, Bruce G.; Fischer, Gunter; Herdegen, Thomas. Publisher: Prous Science, Barcelona, Spain.
 CODEN: 69CEO5; ISBN: 84-8124-165-2
 DT Conference; General Review
 LA English
 AB A review which describes the development of small mol. mimetic compds. as drug candidates. Small mol. neurotrophic factor mimetic compds. are likely to have improved pharmacokinetic properties and less side effects compared with peptide growth factors. To date, few mimetic compds. that bind directly to growth factor receptors have been identified and no agonists at the Trk receptors have been reported. The most promising candidates for mimetics include CEP-1347, which inhibits JNK signaling, immunophilin ligands, which appear to cause neuronal sprouting by an unknown mechanism, and caspase inhibitors, which may reduce cell death assoc. with neurol. disorders.
 IT 156177-65-0, CEP-1347
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (effects of small mol. neurotrophin mimetics on neuronal survival and regeneration in culture and in vivo)
 RN 156177-65-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

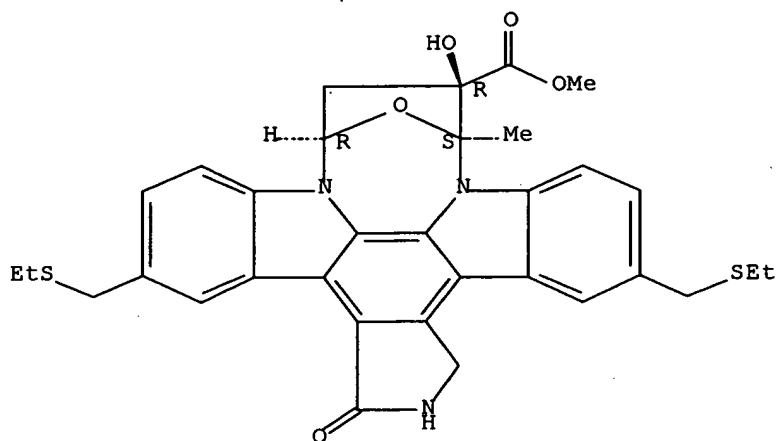
Absolute stereochemistry.



RE.CNT 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 9 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:27143 CAPLUS
 DN 136:194640
 TI Inhibition of the c-Jun N-terminal kinase signaling pathway by the mixed lineage kinase inhibitor CEP-1347 (KT7515) preserves metabolism and growth of trophic factor-deprived neurons
 AU Harris, Charles A.; Deshmukh, Mohanish; Tsui-Pierchala, Brian; Maroney, Anna C.; Johnson, Eugene M., Jr.
 CS Department of Molecular Biology and Pharmacology, Washington University, St. Louis, MO, 63110, USA
 SO Journal of Neuroscience (2002), 22(1), 103-113
 CODEN: JNRSDS; ISSN: 0270-6474
 PB Society for Neuroscience
 DT Journal
 LA English
 AB Nerve growth factor (NGF) deprivation triggers metabolic changes in sympathetic neurons that precede cell death. Here, we investigate the role of the c-Jun N-terminal kinase (JNK) pathway in downregulating neuronal metab. We show that, in the presence of CEP-1347 (KT7515), a small mol. known to block cell death upstream of JNK, cellular metab. is preserved in neurons deprived of NGF. Biochem. data that are presented are consistent with the mechanism of action of CEP-1347 being the inhibition of the mixed lineage kinases (MLKs), known activators of JNK signaling. We demonstrate that CEP-1347-saved neurons continue to grow even in the absence of NGF, indicating that inhibition of the JNK pathway is permissive for neuronal growth in the absence of trophic support. These trophic effects are seen despite the fact that CEP-1347 does not stimulate several known survival kinase pathways. In addn. to blocking Bax-dependent cytochrome c release, the inhibition of the JNK signaling pathway with CEP-1347 also blocks the development of competence-to-die in response to cytosolic cytochrome c. Therefore, inhibition of the JNK signaling pathway with the MLK inhibitor CEP-1347 inhibits both limbs of the apoptotic pathway. Finally, we demonstrate that neurons that have been NGF-deprived long-term but that have been kept alive by caspase inhibitors can be rescued metabolically by CEP-1347 as assessed by soma size, cytochrome c localization, and protein synthesis rates.
 Therefore, we conclude that, in addn. to converting extracellular signals into decisions of life and death, the JNK pathway can modulate cellular metab. directly and thereby maintain not only survival but the "quality of life" of neurons.
 IT 156177-65-0, CEP-1347
 RL: BUU (Biological use, unclassified); PAC (Pharmacological activity); BIOL (Biological study); USES (Uses)
 (c-Jun N-terminal kinase signaling inhibition by mixed lineage kinase inhibitor preserves metab. and growth of trophic factor-deprived neurons)
 RN 156177-65-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

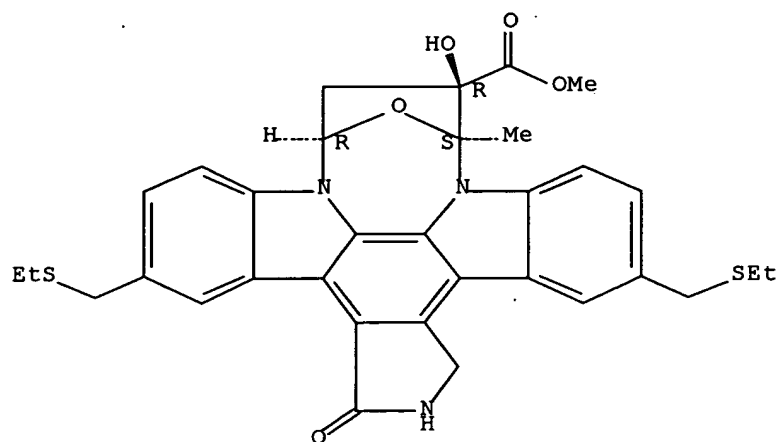
Absolute stereochemistry.



RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 10 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:21235 CAPLUS
 DN 137:179403
 TI Blockade of c-Jun N-terminal kinase pathway attenuates gentamicin-induced cochlear and vestibular hair cell death
 AU Ylikoski, Jukka; Liang, Xing-Qun; Virkkala, Jussi; Pirvola, Ulla
 CS Institute of Biotechnology, University of Helsinki, Helsinki, 00014, Finland
 SO Hearing Research (2002), 163(1-2), 71-81
 CODEN: HERED3; ISSN: 0378-5955
 PB Elsevier Science B.V.
 DT Journal
 LA English
 AB The ototoxic action of aminoglycoside antibiotics leading to the loss of hair cells of the inner ear is well documented. However, the mol. mechanisms are poorly defined. The authors have previously shown that in neomycin-exposed organotypic cultures of the cochlea, the c-Jun N-terminal kinase (JNK) pathway - assocd. with stress, injury and apoptosis - is activated in hair cells and leads to their death. The authors have also shown that hair cell death can be attenuated by CEP-1347, an inhibitor of JNK signalling. In the present study, the authors demonstrate that gentamicin-induced ototoxicity leads to JNK activation and apoptosis in the inner ear hair cells in vivo. The authors also show that systemic administration of CEP-1347 attenuates gentamicin-induced decrease of auditory sensitivity and cochlear hair cell damage. In addn., CEP-1347 treatment reduces the extent of hair cell loss in the ampullary cristae after gentamicin intoxication. Particularly, the inner hair cells of the cochlea and type I hair cells of the vestibular organs are protected. The authors have previously shown that also acoustic overstimulation leads to apoptosis of cochlear hair cells and that CEP-1347 can attenuate noise-induced sensory cell loss. These results suggest that activation of the JNK cascade may be a common mol. outcome of cellular stress in the inner ear sensory epithelia, and that attenuation of the lesion can be provided by inhibiting JNK activation.
 IT 156177-65-0, CEP-1347
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (blockade of c-JNK pathway attenuates gentamicin-induced cochlear and vestibular hair cell death)
 RN 156177-65-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

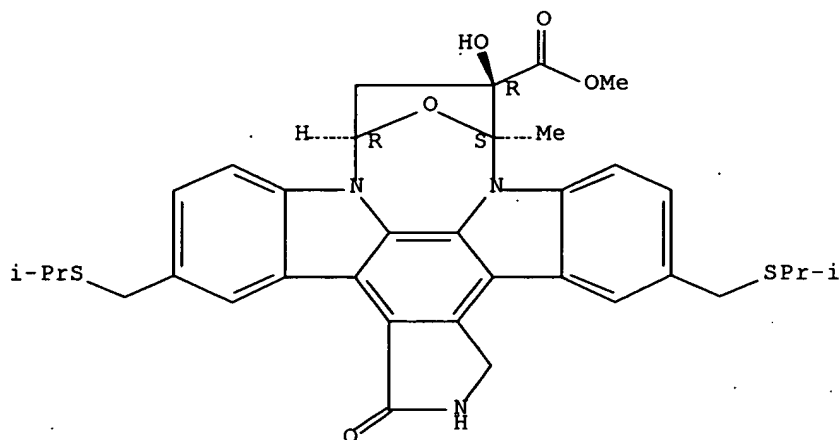
Absolute stereochemistry.



RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 11 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:1465 CAPLUS
 DN 136:363246
 TI Mixed lineage kinase activity of indolocarbazole analogues
 AU Murakata, Chikara; Kaneko, Masami; Gessner, George; Angeles, Thelma S.;
 Ator, Mark A.; O'Kane, Teresa M.; McKenna, Beth Ann W.; Thomas, Beth
 Ann;
 Mathiasen, Joanne R.; Saporito, Michael S.; Bozyczko-Coyne, Donna;
 Hudkins, Robert L.
 CS Kyowa-Hakko Kogyo Co., Ltd., Tokyo, Japan
 SO Bioorganic & Medicinal Chemistry Letters (2002), 12(2), 147-150
 CODEN: BMCLE8; ISSN: 0960-894X
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 AB The MLK1-3 activity for a series of analogs of the indolocarbazole K-
 252a
 is reported. Addn. of 3,9-bis-alkylthiomethyl groups to K-252a results
 in
 potent and selective MLK inhibitors. The in vitro and in vivo neuronal
 survival promoting activity of bis-isopropylthiomethyl-K-252a
 (CEP-11004/KT-8138) is reported. CEP-11004 demonstrated protection of
 the
 JNK kinase pathway following treatment of cells with MPP+ and
 demonstrated
 in vivo protection of dopaminergic terminals with the striatum
 projecting
 from neurons within the substantia nigra om mice following
 administration
 of MPTP. Thus, inhibition of MLKs may be an effective strategy for
 blocking neurodegeneration assocn. with Parkinson's disease.
 IT **178404-52-9P**
 RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); SPN
 (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);
 PREP (Preparation); USES (Uses)
 (mixed lineage kinase inhibitor activity of indolocarbazole analogs
 in
 relation to neuroprotectant activity and treatment of Parkinson's
 disease)
 RN 178404-52-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
 i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-
 hydroxy-9-methyl-5,16-bis[[1-methylethylthio]methyl]-1-oxo-, methyl
 ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 178404-44-9P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(mixed lineage kinase inhibitor activity of indolocarbazole analogs

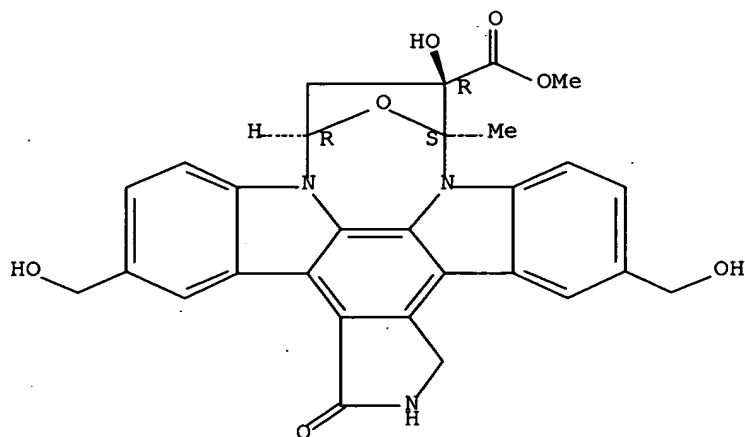
in

relation to neuroprotectant activity and treatment of Parkinson's disease)

RN 178404-44-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 178404-45-0P 178404-53-0P 178404-54-1P
178404-55-2P 178404-56-3P 190319-45-0P
424788-51-2P 424788-52-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(mixed lineage kinase inhibitor activity of indolocarbazole analogs

in

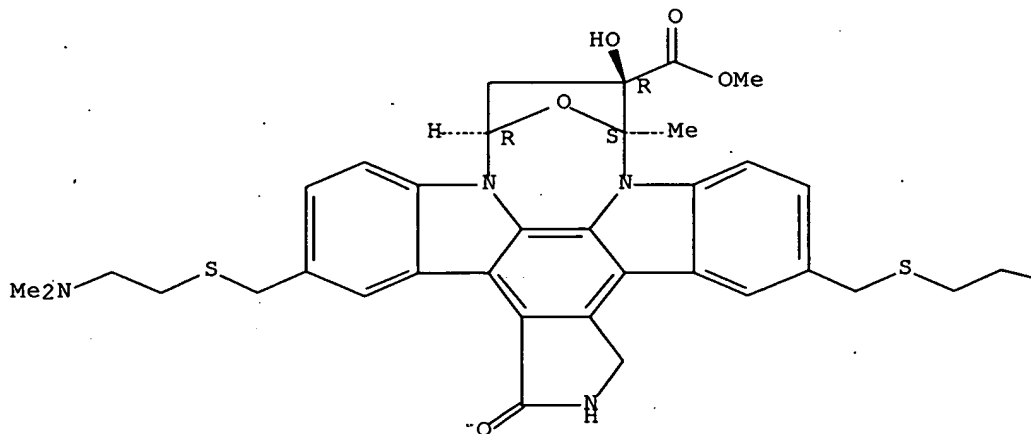
relation to neuroprotectant activity and treatment of Parkinson's disease)

RN 178404-45-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[[2-(dimethylamino)ethyl]thio]methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry:

PAGE 1-A



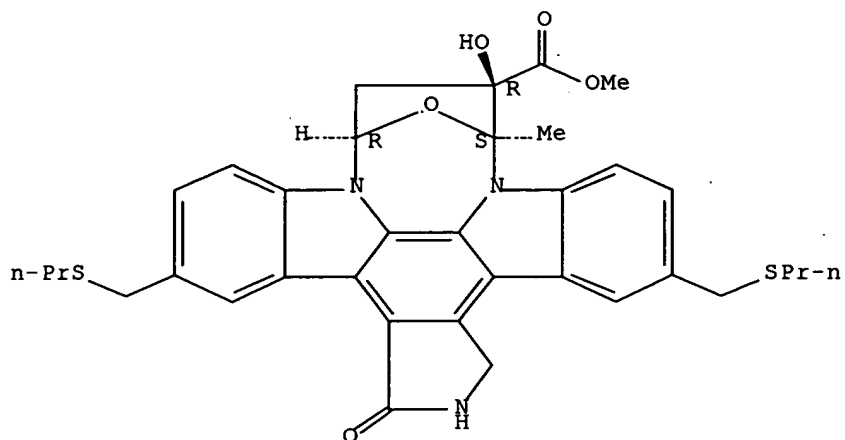
PAGE 1-B

—NMe2

RN 178404-53-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(propylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

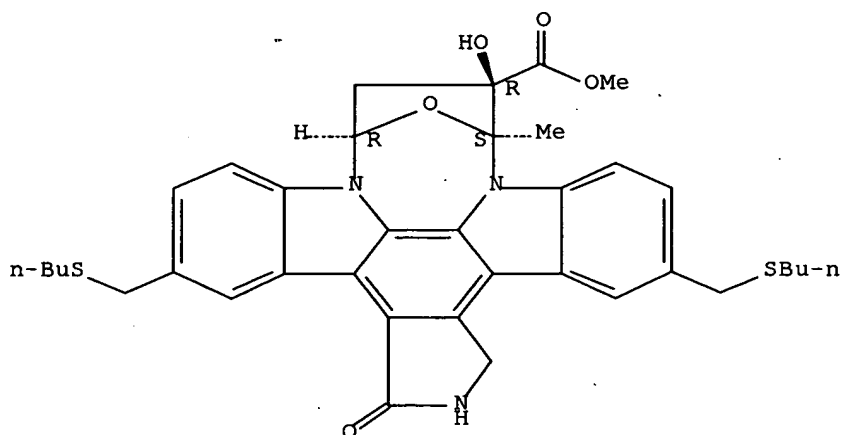
Absolute stereochemistry.



RN 178404-54-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(butylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

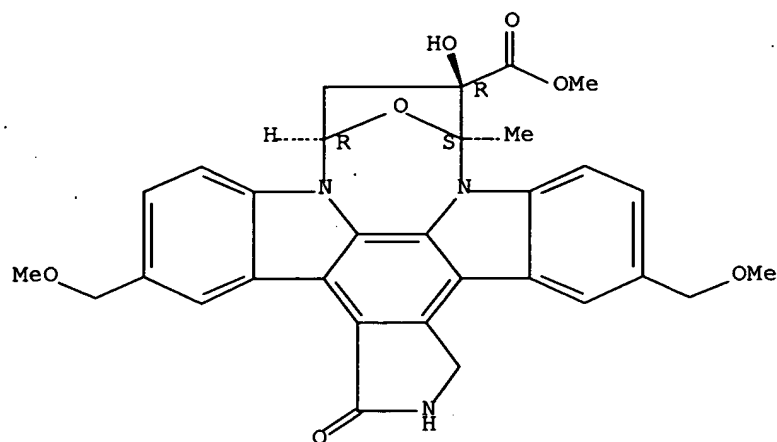
Absolute stereochemistry.



RN 178404-55-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(methoxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

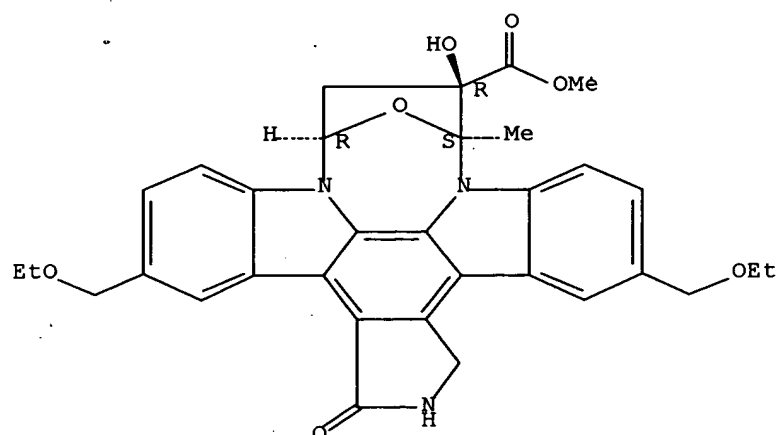
Absolute stereochemistry.



RN 178404-56-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis(ethoxymethyl)-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

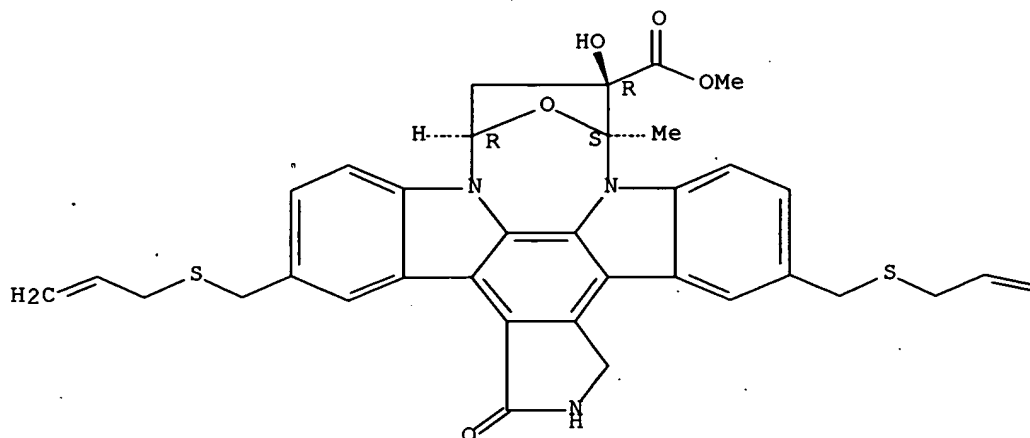
Absolute stereochemistry.



RN 190319-45-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(2-propenylthio)methyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

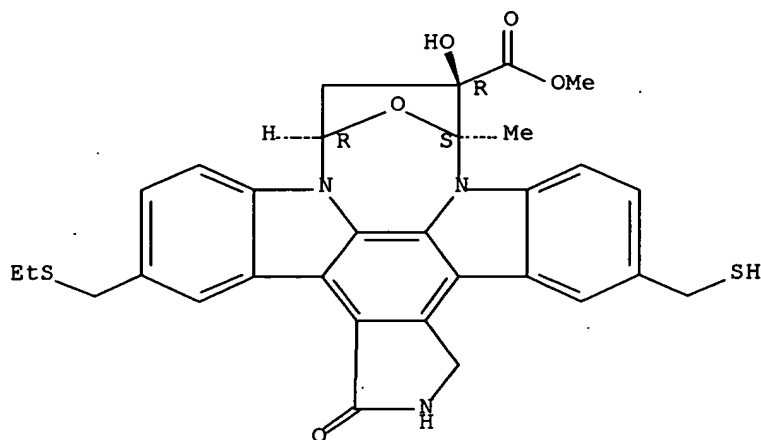
Absolute stereochemistry.



=CH_2

RN 424788-51-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-5-(mercaptomethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

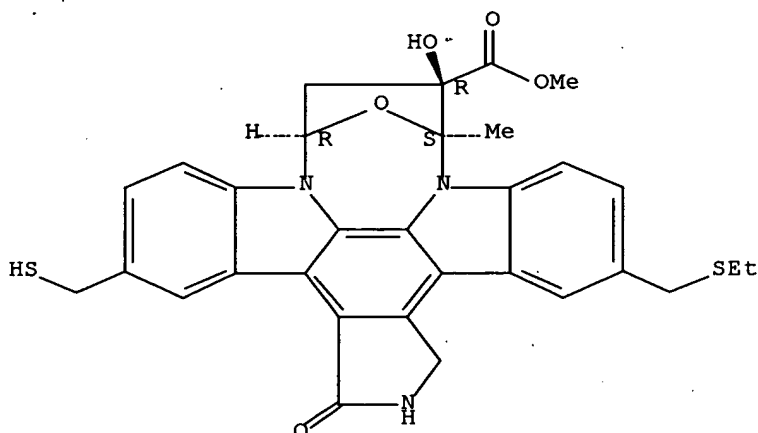
Absolute stereochemistry.



RN 424788-52-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-16-(mercaptomethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 156177-65-0, CEP 1347

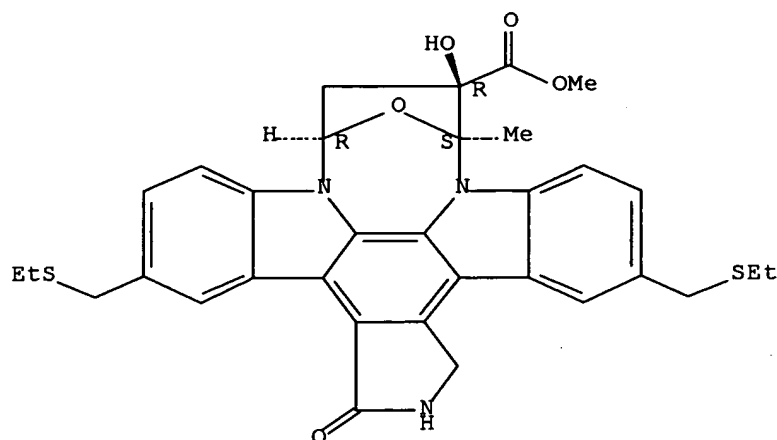
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(mixed lineage kinase inhibitor activity of indolocarbazole analogs in relation to neuroprotectant activity and treatment of Parkinson's disease)

RN 156177-65-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 121664-78-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(mixed lineage kinase inhibitor activity of indolocarbazole analogs

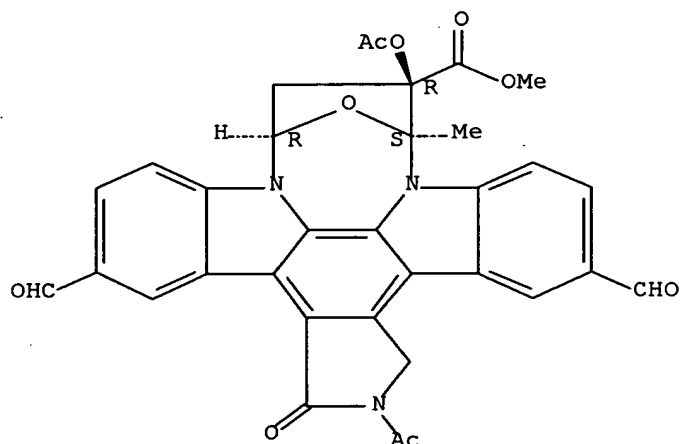
in

relation to neuroprotectant activity and treatment of Parkinson's disease)

RN 121664-78-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5,16-diformyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 200637-29-2P 260388-68-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

RACT

(Reactant or reagent)

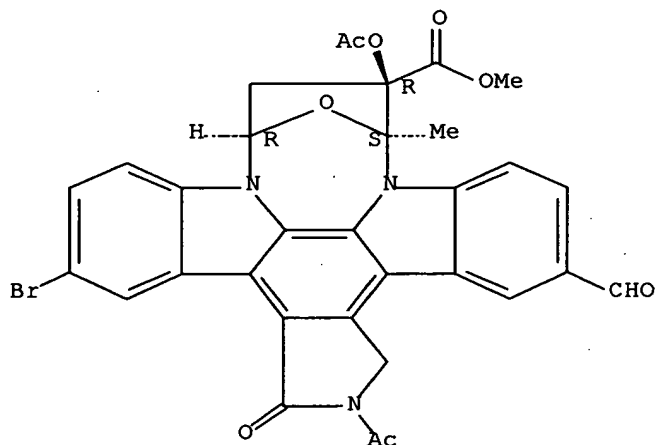
(mixed lineage kinase inhibitor activity of indolocarbazole analogs

in

relation to neuroprotectant activity and treatment of Parkinson's disease)

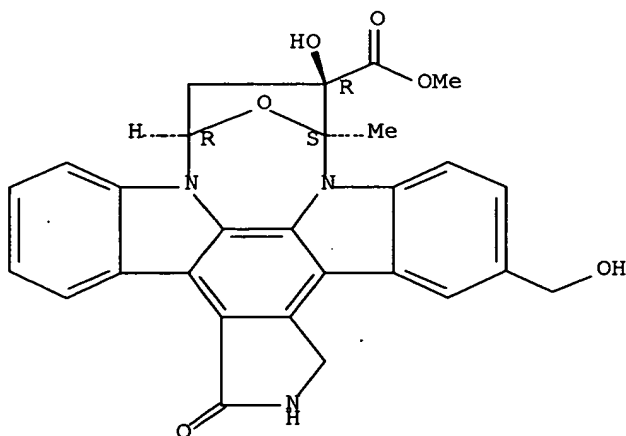
RN 200637-29-2 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-16-bromo-5-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 260388-68-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

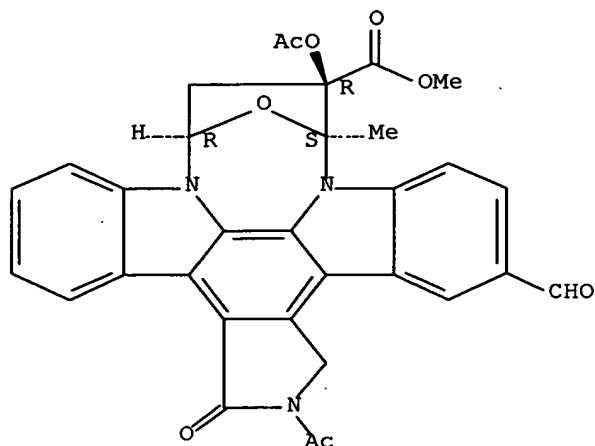
Absolute stereochemistry.



IT 200637-31-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. of)
 RN 200637-31-6 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-

i) [1,6]benzodiazocine-10-carboxylic acid, 2-acetyl-10-(acetyloxy)-5-formyl-
 2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)-
 (9CI) (CA INDEX NAME)

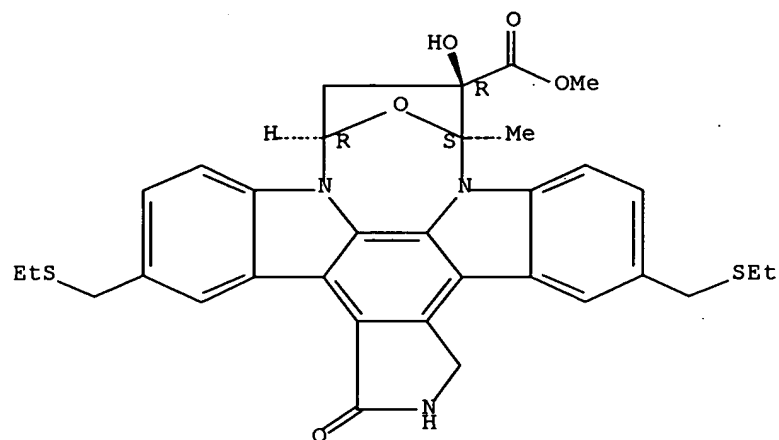
Absolute stereochemistry.



RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 13 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2001:522414 CAPLUS
 DN 135:327235
 TI CEP-1347 (KT7515), a semisynthetic inhibitor of the mixed lineage kinase family
 AU Maroney, Anna C.; Finn, James P.; Connors, Thomas J.; Durkin, John T.; Angeles, Thelma; Gessner, George; Xu, Zhiheng; Meyer, Sheryl L.; Savage, Mary J.; Greene, Lloyd A.; Scott, Richard W.; Vaught, Jeffry L.
 CS Cephalon Inc., West Chester, PA, 19380, USA
 SO Journal of Biological Chemistry (2001), 276(27), 25302-25308
 CODEN: JBCHA3; ISSN: 0021-9258
 PB American Society for Biochemistry and Molecular Biology
 DT Journal
 LA English
 AB CEP-1347 (KT7515) promotes neuronal survival at dosages that inhibit activation of the c-Jun amino-terminal kinases (JNKs) in primary embryonic cultures and differentiated PC12 cells after trophic withdrawal and in mice treated with 1-methyl-4-Ph tetrahydropyridine. In an effort to identify mol. target(s) of CEP-1347 in the JNK cascade, JNK1 and known upstream regulators of JNK1 were co-expressed in Cos-7 cells to det. whether CEP-1347 could modulate JNK1 activation. CEP-1347 blocked JNK1 activation induced by members of the mixed lineage kinase (MLK) family (MLK3, MLK2, MLK1, dual leucine zipper kinase, and leucine zipper kinase).
 The response was selective because CEP-1347 did not inhibit JNK1 activation in cells induced by kinases independent of the MLK cascade. CEP-1347 inhibition of recombinant MLK members in vitro was competitive with ATP, resulting in IC50 values ranging from 23 to 51 nM, comparable to inhibitory potencies obsd. in intact cells. In addn., overexpression of MLK3 led to death in Chinese hamster ovary cells, and CEP-1347 blocked this death at doses comparable to those that inhibited MLK3 kinase activity. These results identify MLKs as targets of CEP-1347 in the JNK signaling cascade and demonstrate that CEP-1347 can block MLK-induced cell death.
 IT 156177-65-0, CEP-1347
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study);
 USES
 (Uses)
 (CEP-1347 (KT7515), a semisynthetic inhibitor of mixed lineage kinase family)
 RN 156177-65-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

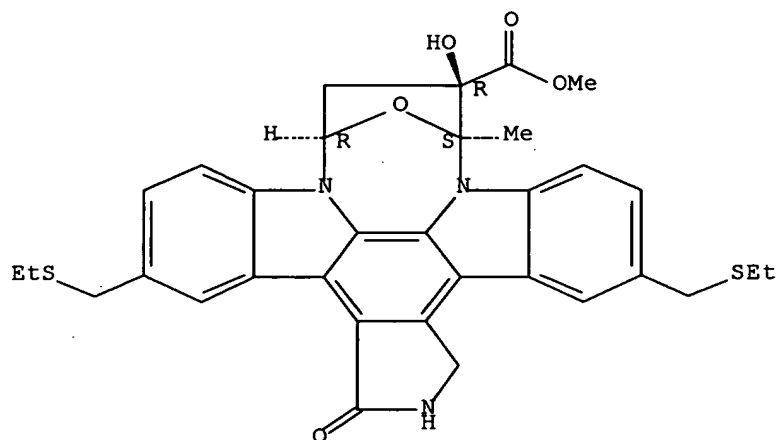
Absolute stereochemistry.



RE.CNT 75 THERE ARE 75 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 14 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2001:361635 CAPLUS
 DN 135:205461
 TI CEP-1347/KT-7515, an inhibitor of SAPK/JNK pathway activation, promotes survival and blocks multiple events associated with A.beta.-induced cortical neuron apoptosis
 AU Bozyczko-Coyne, Donna; O'Kane, Teresa M.; Wu, Zhi-Liang; Dobrzanski, Pawel; Murthy, Seetha; Vaught, Jeffry L.; Scott, Richard W.
 CS Cephalon Inc., West Chester, PA, 19380, USA
 SO Journal of Neurochemistry (2001), 77(3), 849-863
 CODEN: JONRA9; ISSN: 0022-3042
 PB Blackwell Science Ltd.
 DT Journal
 LA English
 AB Although the mechanism of neuronal death in Alzheimer's disease (AD) has yet to be elucidated, a putative role for c-jun in this process has emerged. Thus, it was of interest to delineate signal transduction pathway(s) which regulate the transcriptional activity of c-jun, and relate these to alternate gene inductions and biochem. processes assocd. with beta-amyloid (A.beta.) treatment. In this regard, the survival promoting activity of CEP-1347, an inhibitor of the stress-activated/c-jun N-terminal (SAPK/JNK) kinase pathway, was evaluated against A.beta.-induced cortical neuron death in vitro. Moreover, CEP-1347 was used as a pharmacol. probe to assoc. multiple biochem. events with A.beta.-induced activation of the SAPK/JNK pathway. CEP-1347 promoted survival and blocked A.beta.-induced activation of JNK kinase (MKK4, also known as MEK-4, JNKK and SEK1) as well as other downstream events assocd. with JNK pathway activation. CEP-1347 also blocked A.beta.-induction of cyclin D1 and DP5 genes and blocked A.beta.-induced increases in cytoplasmic cytochrome c, caspase 3-like activity and calpain activation.
 The crit. time window for cell death blockade by CEP-1347 resided within the peak of A.beta.-induced MKK4 activation, thus defining this point as the most upstream event correlated to its survival-promoting activity. Together, these data link the SAPK/JNK pathway and multiple biochem. events assocd. with A.beta.-induced neuronal death and further delineate the point of CEP-1347 interception within this signal transduction cascade.
 IT 156177-65-0, CEP-1347
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study);
 USES (Uses)
 (CEP-1347/KT-7515, inhibitor of SAPK/JNK pathway activation, promotes survival and blocks multiple events assocd. with A.beta.-induced cortical neuron apoptosis)
 RN 156177-65-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

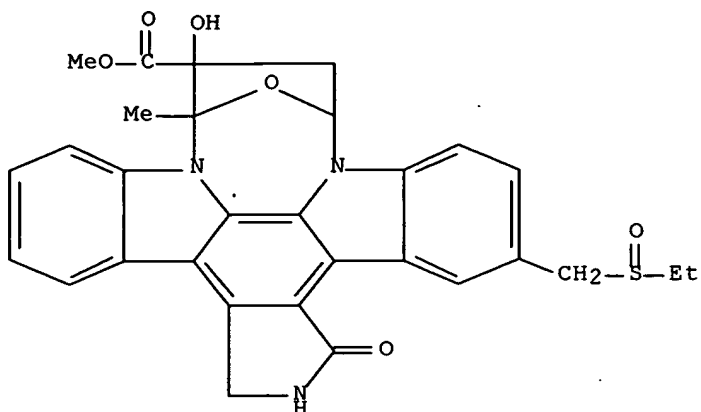
Absolute stereochemistry.



RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

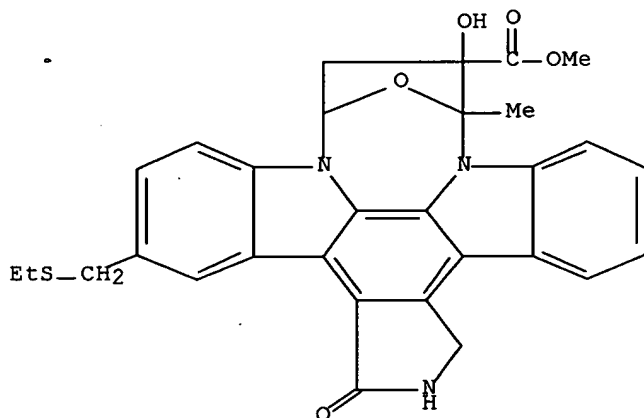
L7 ANSWER 15 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2001:178436 CAPLUS
 DN 134:227381
 TI Particle-forming compositions containing fused pyrrolocarbazoles
 IN Dickason, David A.; Patel, Piyush R.; Corvari, Vincent; Shek, Efraim;
 Herman, Joseph L.; Skell, Jeffry M.
 PA Cephalon, Inc., USA
 SO U.S., 18 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | US 6200968 | B1 | 20010313 | US 1999-368409 | 19990805 |
| | CA 2338546 | AA | 20000217 | CA 1999-2338546 | 19990806 |
| | EP 1102758 | A1 | 20010530 | EP 1999-940914 | 19990806 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| PRAI | US 1998-95611P | P | 19980806 | | |
| | US 1999-368409 | A | 19990805 | | |
| | WO 1999-US17795 | W | 19990806 | | |
| OS | MARPAT 134:227381 | | | | |
| AB | A non-aq., particle-forming compn. contg. fused pyrrolocarbazole and a surfactant is disclosed. Upon contact with an aq. medium, the particle-forming compn. spontaneously disperses into suspended particles, thereby forming a stable suspension that provides greatly improved bioavailability of orally administered fused pyrrolocarbazole compds. Pyrrolocarbazoles-contg. compns. are useful for treatment of neurol. disorders and cancer, esp. prostate cancer, in mammals. | | | | |
| IT | 173328-05-7 173328-06-8 263554-49-0 329684-26-6 329684-32-4 329684-33-5 329684-37-9 329684-38-0 329684-39-1 329684-40-4 RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (prepn. and therapeutic use of particle-forming compns. contg. fused pyrrolocarbazoles with improved bioavailability) | | | | |
| RN | 173328-05-7 CAPLUS | | | | |
| CN | 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfinyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester (9CI) (CA INDEX NAME) | | | | |



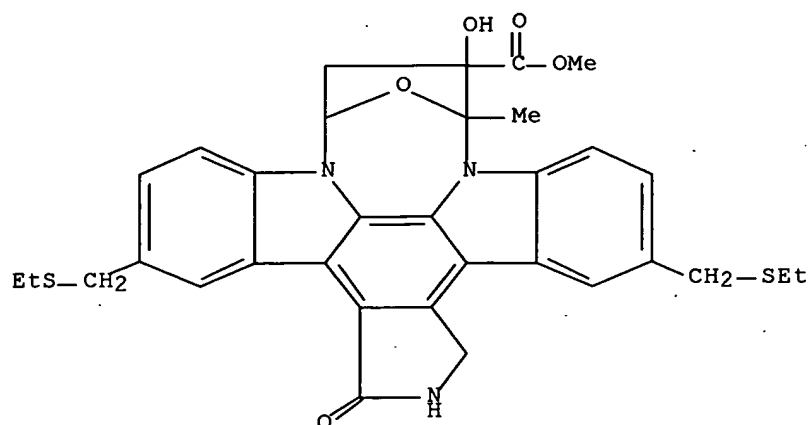
RN 173328-06-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester (9CI)
(CA INDEX NAME)



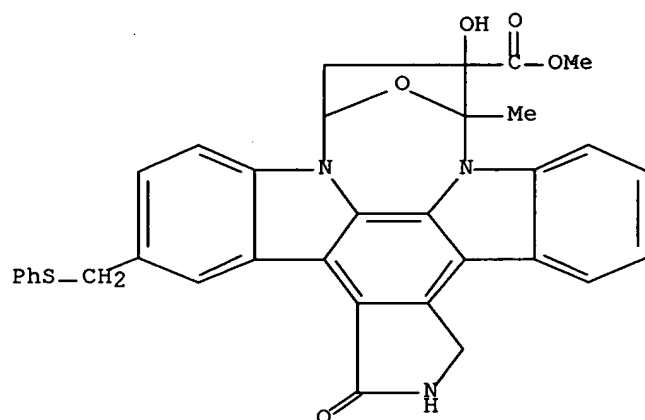
RN 263554-49-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester (9CI)
(CA INDEX NAME)



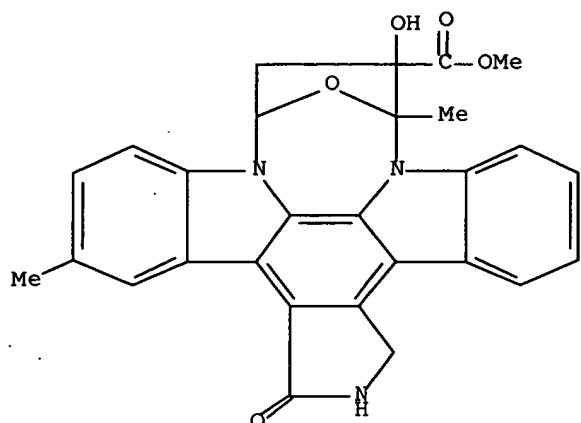
RN 329684-26-6 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-16-[(phenylthio)methyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 329684-32-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9,16-dimethyl-1-oxo-, methyl ester (9CI) (CA INDEX NAME)

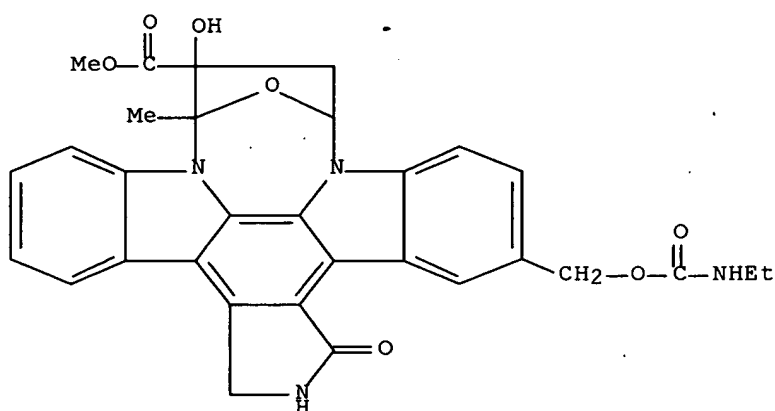


RN 329684-33-5 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-

[[[(ethylamino)carbonyl]oxy]m

ethyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester (9CI) (CA INDEX NAME)

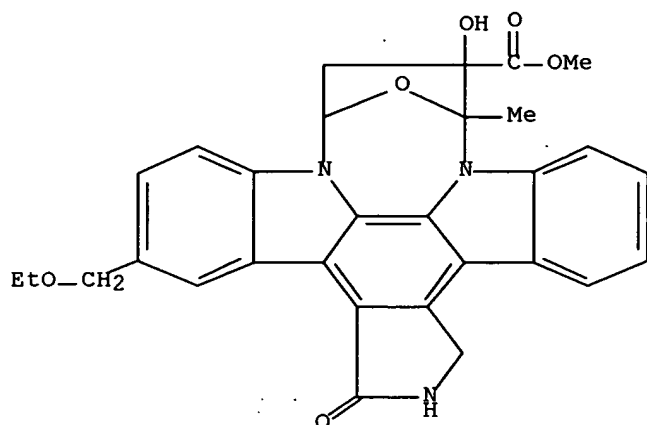


RN 329684-37-9 CAPLUS

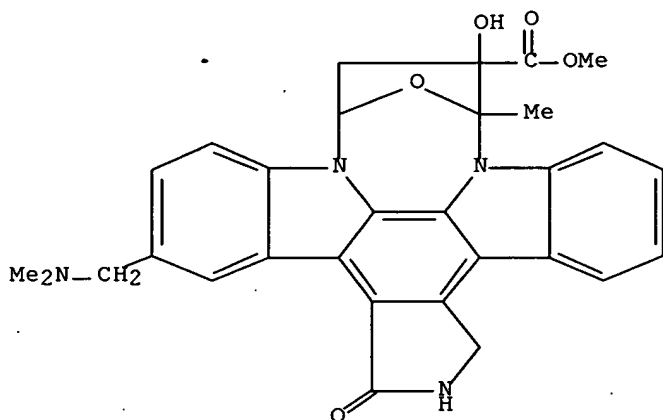
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-(ethoxymethyl)-

2,3,9,10,11,12-

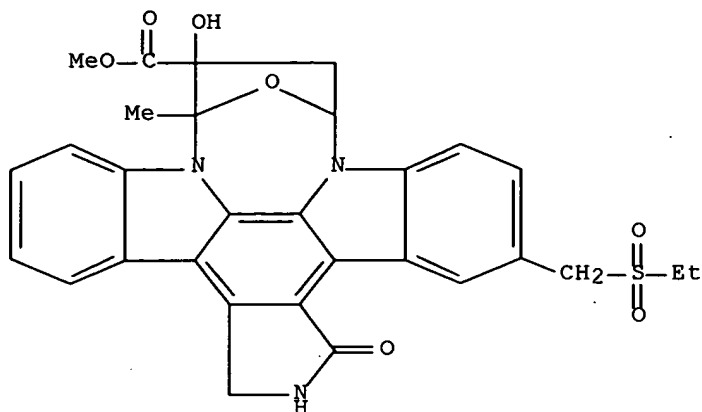
hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



RN 329684-38-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(dimethylamino)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester (9CI)
 (CA INDEX NAME)

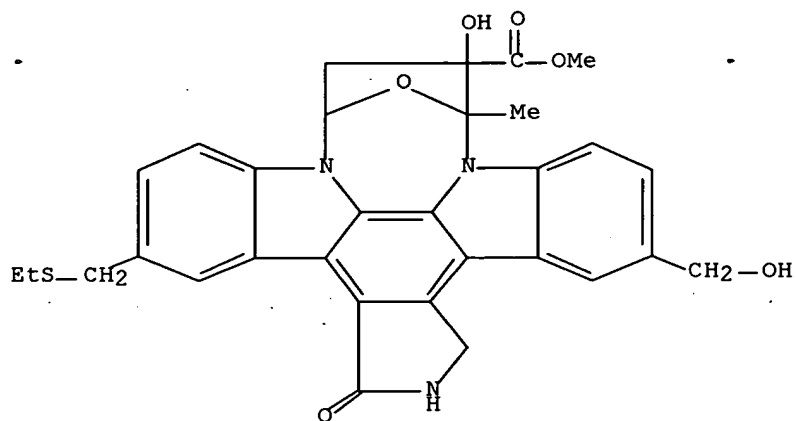


RN 329684-39-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylsulfonyl)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester (9CI)
 (CA INDEX NAME)



RN 329684-40-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 16 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2000:731495 CAPLUS
 DN 133:301183
 TI Nasal compositions containing diindolopyrrolobenzodiacinecarboxylate derivatives
 IN Tomoda, Hiroshi; Yamamoto, Yoshihiko; Kato, Hiromi; Nakakura, Seiji; Hayakawa, Eiji
 PA Kyowa Hakko Kogyo Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|------|----------|-----------------|----------|
| PI | JP 2000290184 | A2 | 20001017 | JP 1999-95033 | 19990401 |
| PRAI | JP 1999-95033 | | 19990401 | | |
| OS | MARPAT 133:301183 | | | | |

AB This present invention relates to nasal compns. comprising K 252A derivs.

and phospholipids as solubilizers. K 252 A 5,16-bis[(ethylthio)methyl] deriv. (known as CEP 1347) 3 mg was dissolved in 10 mL CHCl₃/EtOH (1:1) solvent and mixed with 150 mg lysophosphatidylcholine dissolved in 10 mL CHCl₃/EtOH (1:1) solvent. Water 2 mL was added to a thin membrane obtained after removal of the solvents to give a nasal prepn.

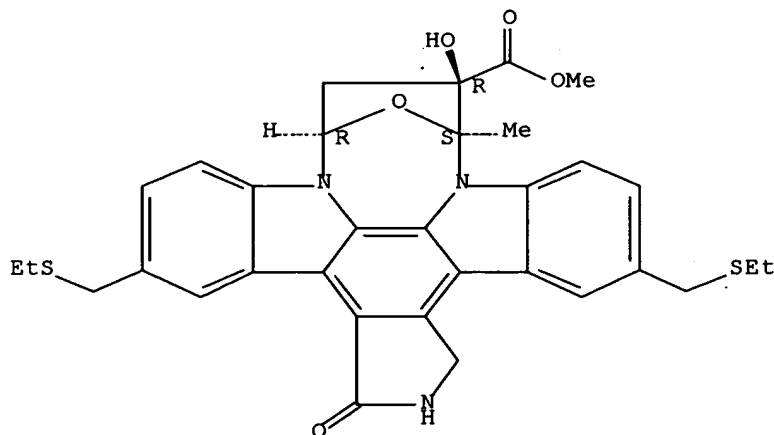
IT 156177-65-0

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nasal compns. contg. K 252A derivs. and solubilizers)

RN 156177-65-0 CAPLUS

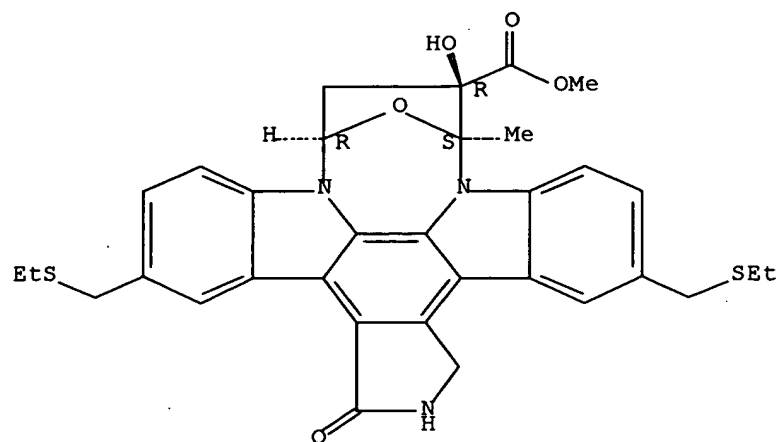
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 17 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2000:567071 CAPLUS
 DN 133:276213
 TI CEP-1347 increases ChAT activity in culture and promotes cholinergic neurone survival following fimbria-fornix lesion
 AU Harper, Sarah J.; Saporito, Michael S.; Hewson, Louise; Young, Lisa; Smith, David; Rigby, Mike; Jackson, Philip; Curtis, Neil; Swain, Chris; Hefti, Franz; Vaught, L.; Sirinathsinghji, Dalip
 CS Department of Pharmacology, Merck Sharp and Dohme Research Laboratories, Neuroscience Research Centre, Harlow, CM20 2QR, UK
 SO NeuroReport (2000), 11(10), 2271-2276
 CODEN: NERPEZ; ISSN: 0959-4965
 PB Lippincott Williams & Wilkins
 DT Journal
 LA English
 AB Recent evidence suggests that the activation of the Jun N-terminal kinase (JNK) signal transduction pathway may be important in neuronal responses to stresses such as trophic factor deprivation. Preventing the activation of JNK and expression of c-Jun may, therefore, be neuroprotective. Here, the authors report that the small mol. CEP-1347, which has been shown to inhibit the JNK signaling pathway, promotes cholinergic activity in cultured embryonic septal neurons. In vivo, the authors have shown that CEP-1347, administered either by sub-cutaneous (s.c.) injection or by continuous infusion, is partially neuroprotective, for cholinergic neurons in the medial septum, following fimbria-fornix transection. These data suggest that small mols. such as CEP-1347 may have beneficial effects in treating neurodegenerative diseases.
 IT 156177-65-0, CEP-1347
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (CEP-1347 increases ChAT activity in culture and promotes septal cholinergic neuron survival following fimbria-fornix lesion in rats)
 RN 156177-65-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 18 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2000:408826 CAPLUS
 DN 133:38233
 TI Indolocarbazole derivatives as NF-.kappa. B activation inhibitors
 IN Hamano, Masami; Ikeda, Shunichi; Shinoda, Tatsuya; Nishi, Tatsuya; Miki, Ichiro; Masaki, Shigehiro
 PA Kyowa Hakko Kogyo Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 30 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|------------------|------|----------|-----------------|----------|
| PI | JP 2000169479 | A2 | 20000620 | JP 1998-349773 | 19981209 |
| PRAI | JP 1998-349773 | | 19981209 | | |
| OS | MARPAT 133:38233 | | | | |

AB Claimed are NF-.kappa. B activation inhibitors contg. indolocarbazole derivs. (Markush structure given) as active ingredients. The bioactivities of the title compds. were demonstrated.

IT **275367-20-9 275367-21-0**

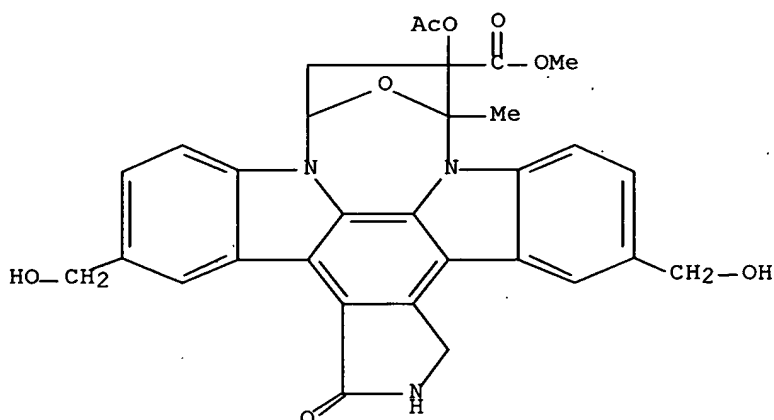
RL: RCT (Reactant); RACT (Reactant or reagent)
 (indolocarbazole derivs. as NF-.kappa. B activation inhibitors)

RN 275367-20-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-(acetyloxy)-2,3,9,10,11,12-hexahydro-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester (9CI)

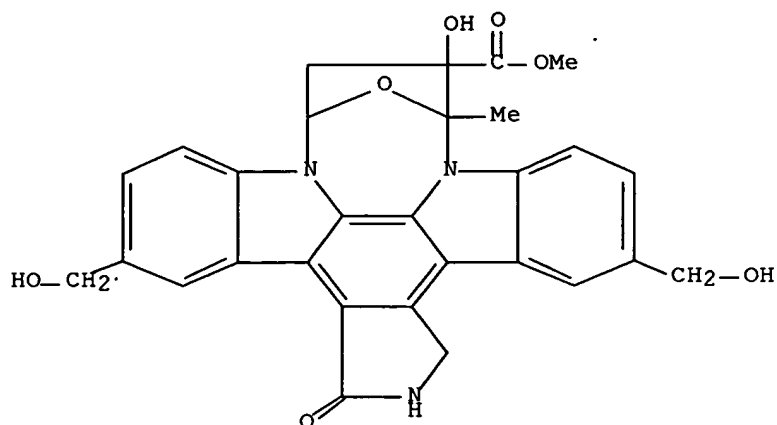
(CA

INDEX NAME)



RN 275367-21-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



IT 275367-14-1P 275367-15-2P 275367-16-3P

275367-17-4P 275367-18-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);

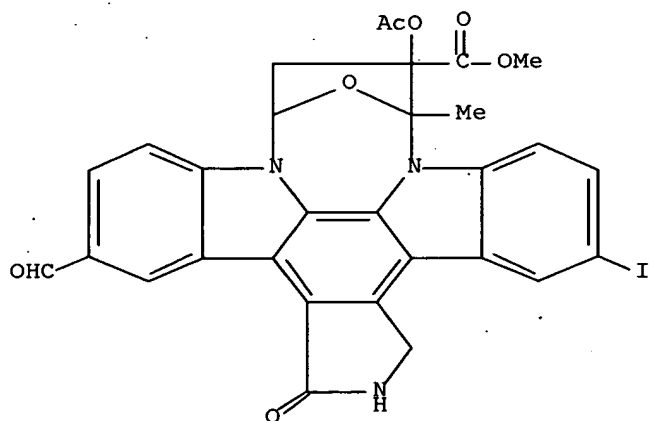
RACT

(Reactant or reagent)

(indolocarbazole derivs. as NF-.kappa. B activation inhibitors)

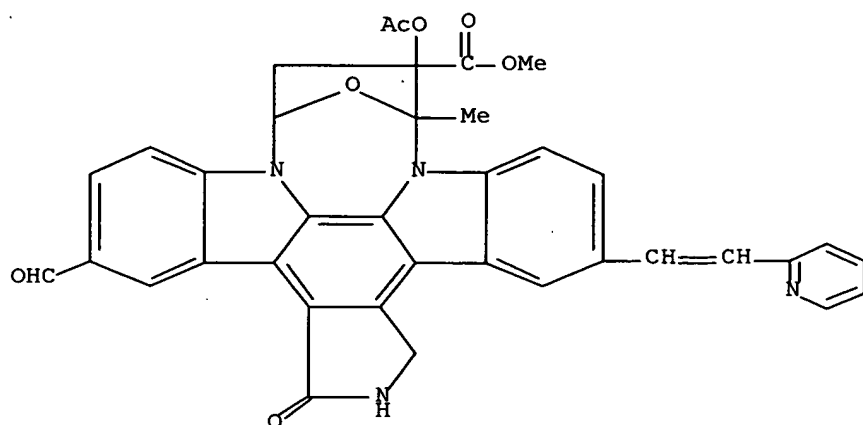
RN 275367-14-1 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-(acetyloxy)-16-formyl-2,3,9,10,11,12-hexahydro-5-iodo-9-methyl-1-oxo-, methyl ester (9CI) (CA INDEX NAME)



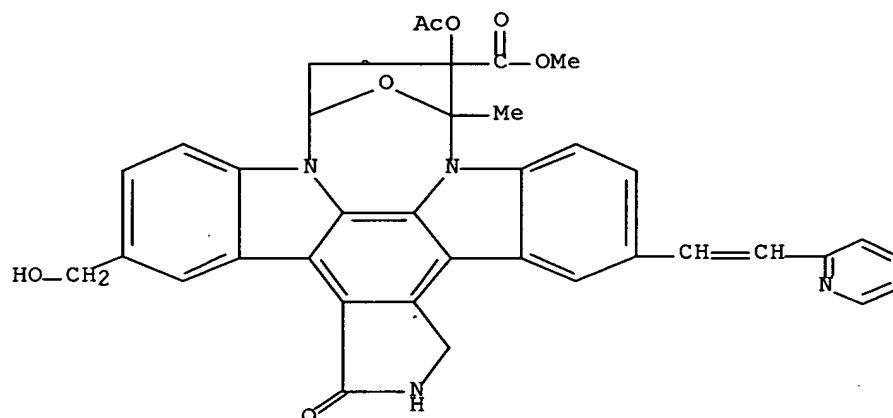
RN 275367-15-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-(acetyloxy)-16-formyl-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethenyl]-, methyl ester (9CI) (CA INDEX NAME)



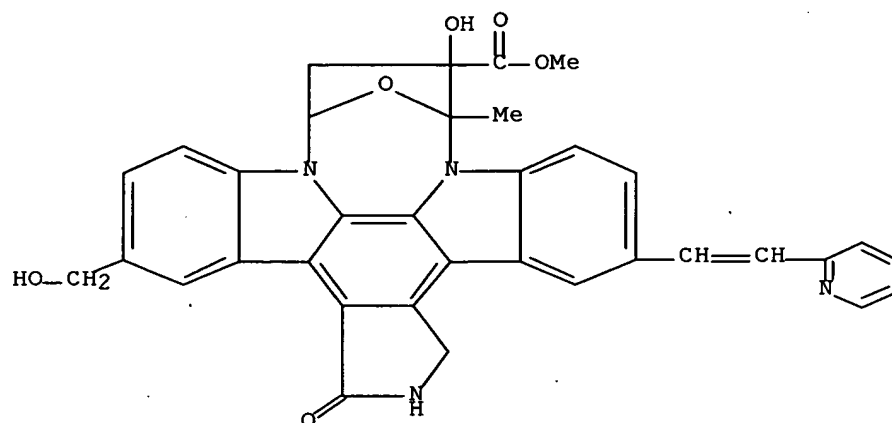
RN 275367-16-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-(hydroxymethyl)-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethenyl]-, methyl ester (9CI) (CA INDEX NAME)



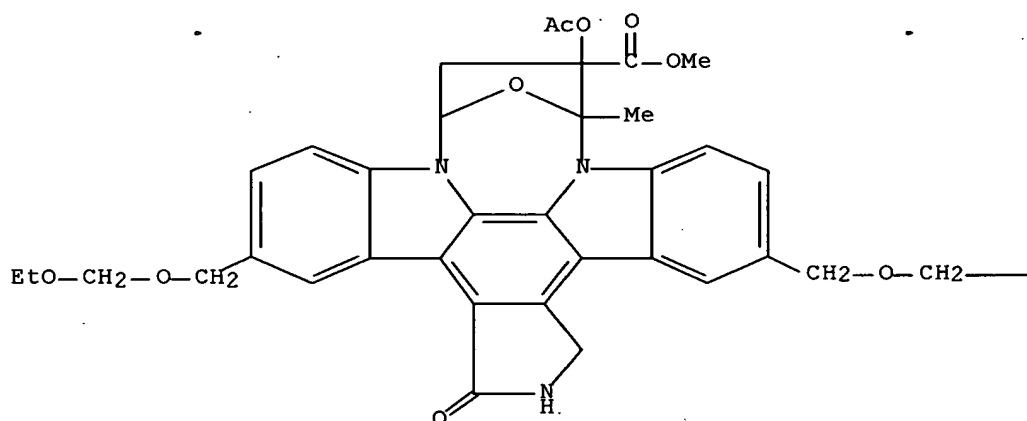
RN 275367-17-4 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-16-(hydroxymethyl)-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 275367-18-5 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-(acetyloxy)-5,16-bis[(ethoxymethoxy)methyl]-2,3,9,10,11,12-hexahydro-9-methyl-1-oxo-, methyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

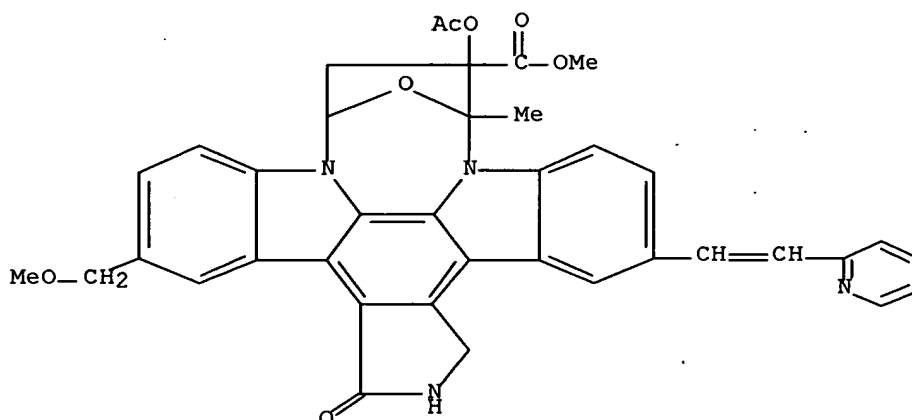
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IT 275367-10-7P 275367-11-8P 275367-12-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
(indolocarbazole derivs. as NF-.kappa. B activation inhibitors)

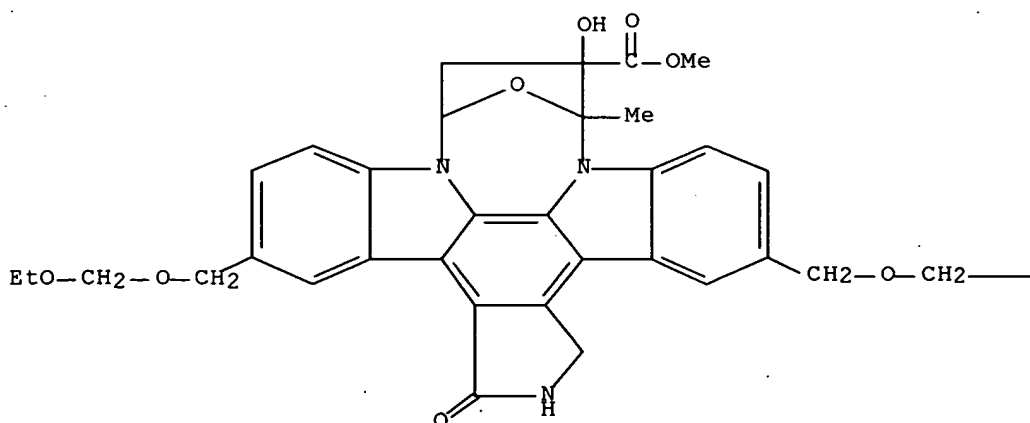
RN 275367-10-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 10-(acetyloxy)-2,3,9,10,11,12-hexahydro-16-(methoxymethyl)-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 275367-11-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethoxymethoxy)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester (9CI)
(CA INDEX NAME)

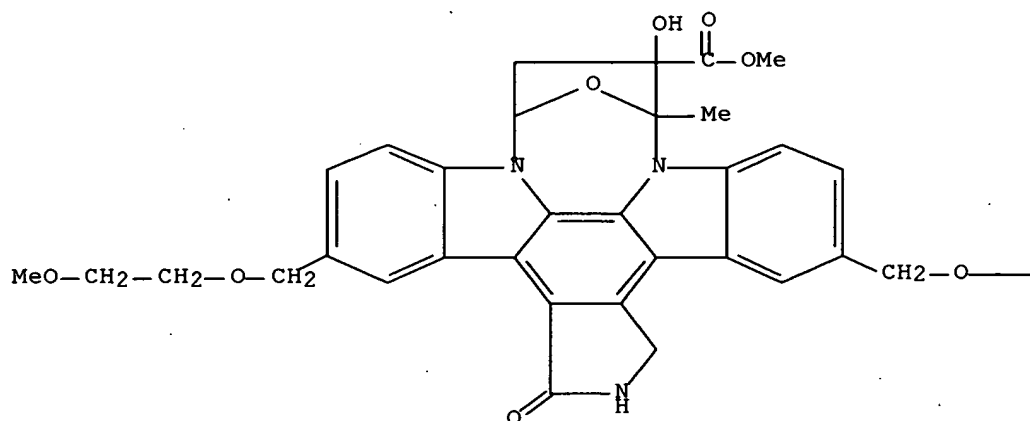


PAGE 1-A

—OEt

RN 275367-12-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis[(2-methoxyethoxy)methyl]-9-methyl-1-oxo-, methyl ester
 (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

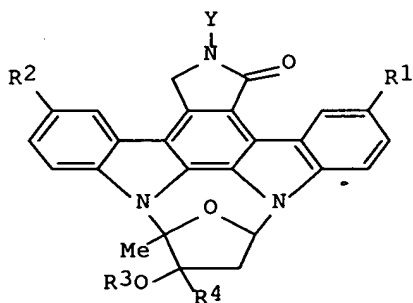
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L7 ANSWER 19 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2000:405881 CAPLUS
 DN 133:42252
 TI Glycosylated indolocarbazole derivative glycosides as protein kinase C inhibitors, their enzymic manufacture, and their use
 IN Mochida, Kenichi; Ue, Harumi
 PA Kyowa Hakko Kogyo Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|------------------|------|----------|-----------------|----------|
| PI | JP 2000169496 | A2 | 20000620 | JP 1998-349774 | 19981209 |
| PRAI | JP 1998-349774 | | 19981209 | | |
| OS | MARPAT 133:42252 | | | | |
| GI | | | | | |



I

AB The glycosides I [R1, R2 = H, lower alkyl, lower hydroxyalkyl, lower alkoxyethyl, lower alkylthiomethyl, lower alkylsulfinyl, lower alkoxyalkoxyethyl, NO2, acyl, acyloxy, acyloxyethyl, lower alkoxy, NR5R6 (one of R5 and R6 = H, and the other = H, lower alkyl, acyl, carbamoyl, lower alkenylcarbonyl, lower alkylaminocarbonyl, arylaminocarbonyl, or R5, R6 = lower alkyl), sulfo, SO3NR7R8 (R7, R8 = H, lower alkyl, or NR7R8 = heterocyclyl), OCO2R9 [R9 = lower alkyl, (un)substituted aryl], OCOR10R11 (R10, R11 = H, lower alkyl, or NR10R11 = heterocyclyl), AOG1 (A = lower alkylene,; G1 = monosaccharide or oligosaccharide residue), OH, halo; R3 = H, lower alkyl, acyl, carbamoyl; R4 = lower alkoxyethyl, CH2OH, CHO, carboxy, lower alkylhydrazinocarbonyl, CH:NR12 [R12 = OH, carbamoylamino, NR13R14 (R13, R14 = H, lower alkyl, or NR13R14 = heterocyclyl), guanidino, 2-imidazolylamino], CONHR15 (R15 = residue of .alpha.-amino acid, in which carboxy group may be protected), CH2COR16 (R16 = residue of .alpha.-amino acid, in which amino group may be protected), CH2OG2 (G2 =

monosaccharide

or oligosaccharide residue); Y = H, halo, lower alkyl, aralkyl, aryl, carbamoyl; essentially R1 and/or R2 = AOG1 or R4 = CH2OG2] (II) or their pharmacol. acceptable salts are manufd. by treating the corresponding OH compds. with sugar donors in the presence of carbohydrate-hydrolyzing enzymes. I inhibit protein kinase C and are useful for treatment of cardiovascular diseases, inflammation, allergy, tumors, etc. A DMF

soln.

of I (R1 = R2 = R3 = Y = H, R4 = CH2OH) (III) was treated with phosphate buffer and .beta.-galactosidase at 40.degree. for 30 min to give 23.2%

II

(R1 = R2 = R3 = Y = H, R4 = .beta.-D-galactopyranosyloxymethyl) (IV). Water soly. of IV was 0.30 mg/mL, vs. 0.10 mg/mL for III. IC50 of IV against protein kinase C was 0.057 mM.

IT 274926-31-7P 274926-32-8P 274926-33-9P

274926-34-0P 274926-35-1P

RL: BAC (Biological activity or effector, except adverse); BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL

(Biological

study); PREP (Preparation); USES (Uses)

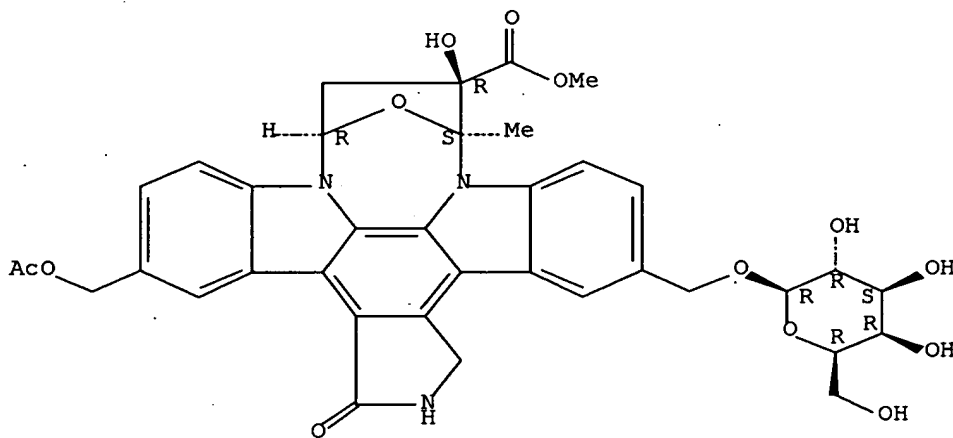
(enzymic manuf. of glycosylated indolocarbazoles with increased water soly. as protein kinase C inhibitors)

RN 274926-31-7 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(.beta.-D-galactopyranosyloxy)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-

9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

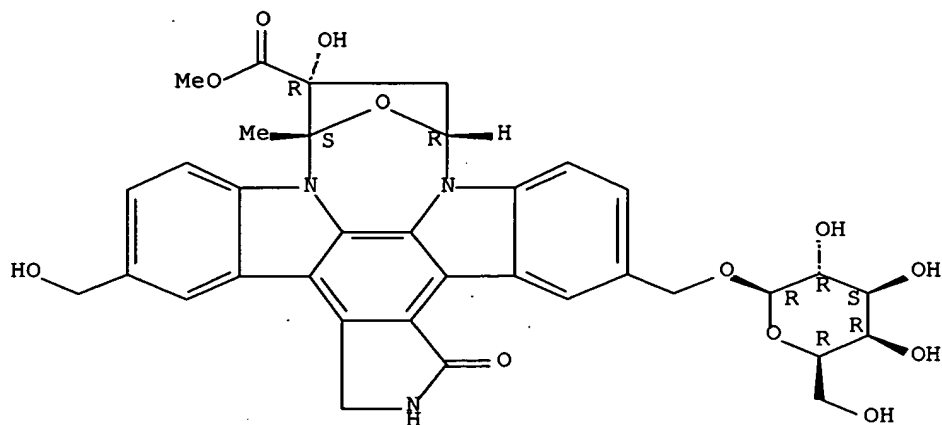
Absolute stereochemistry.



RN 274926-32-8 CAPLUS

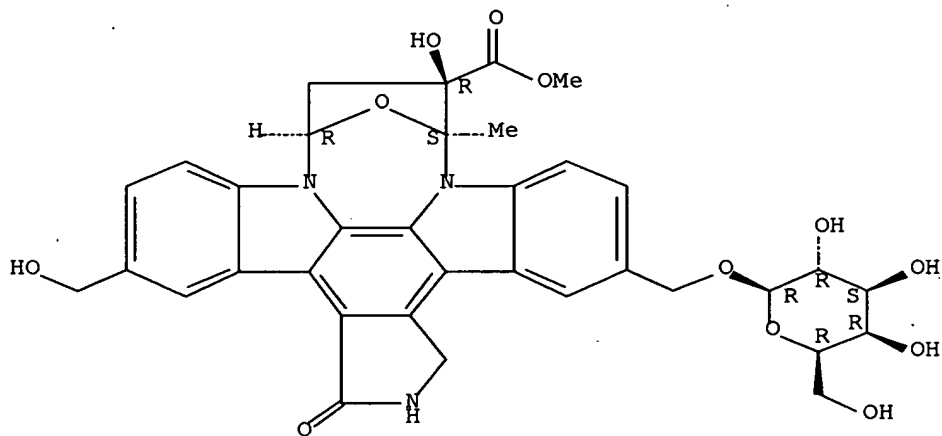
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(.beta.-D-galactopyranosyloxy)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



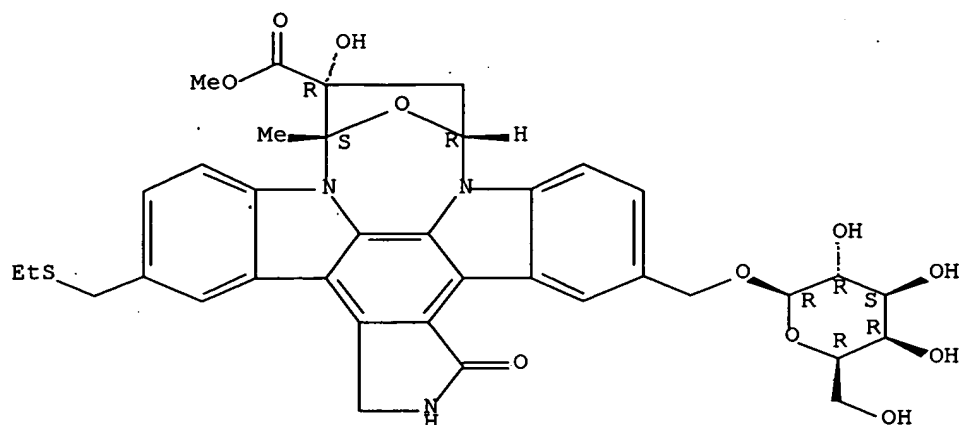
RN 274926-33-9 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[(.beta.-D-galactopyranosyloxy)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



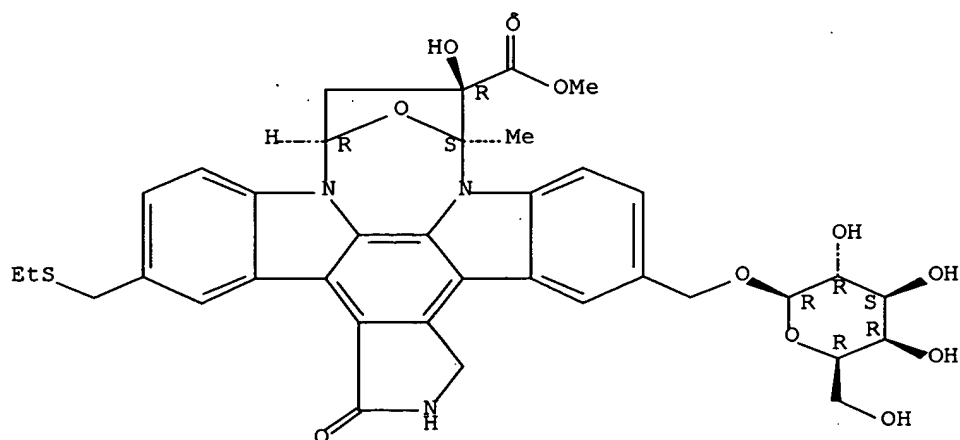
RN 274926-34-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[(ethylthio)methyl]-16-[(.beta.-D-galactopyranosyloxy)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



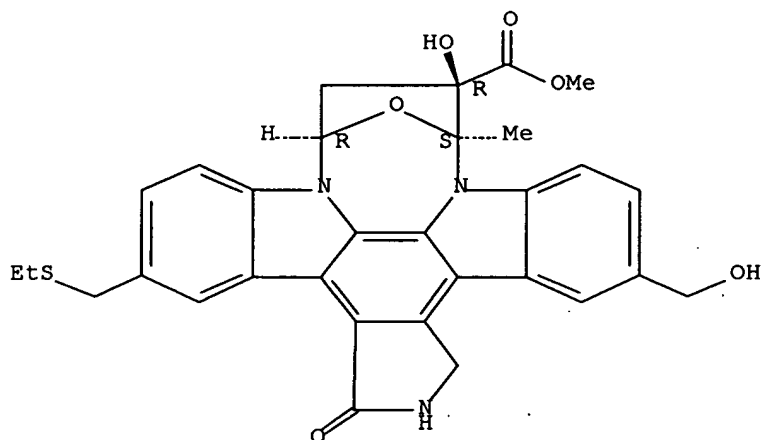
RN 274926-35-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-5-[(.beta.-D-galactopyranosyloxy)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 156177-66-1 178404-44-9 274926-36-2
 274926-37-3
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (enzymic manuf. of glycosylated indolocarbazoles with increased water soly. as protein kinase C inhibitors)
 RN 156177-66-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

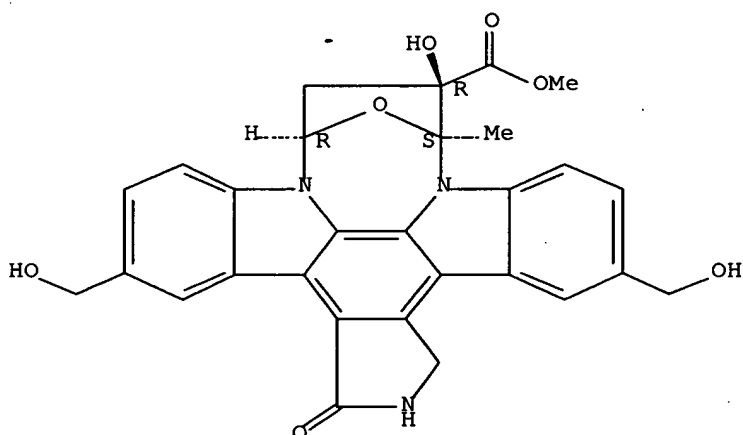
Absolute stereochemistry.



RN 178404-44-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-5,16-bis(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

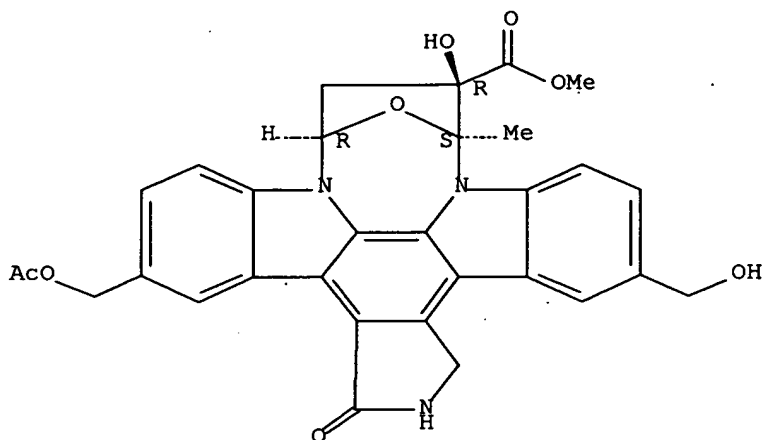
Absolute stereochemistry.



RN 274926-36-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[(acetyloxy)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

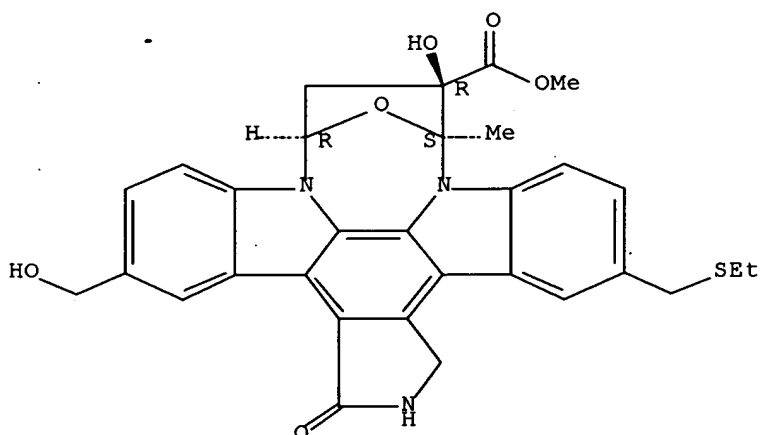
Absolute stereochemistry.



RN 274926-37-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5-[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-16-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 20 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2000:260012 CAPLUS
 DN 132:260699
 TI Remedies for ocular diseases
 IN Nakata, Katsuhiko; Kageyama, Masaaki
 PA Kyowa Hakko Kogyo Co., Ltd., Japan; Cephalon, Inc.
 SO PCT Int. Appl., 16 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

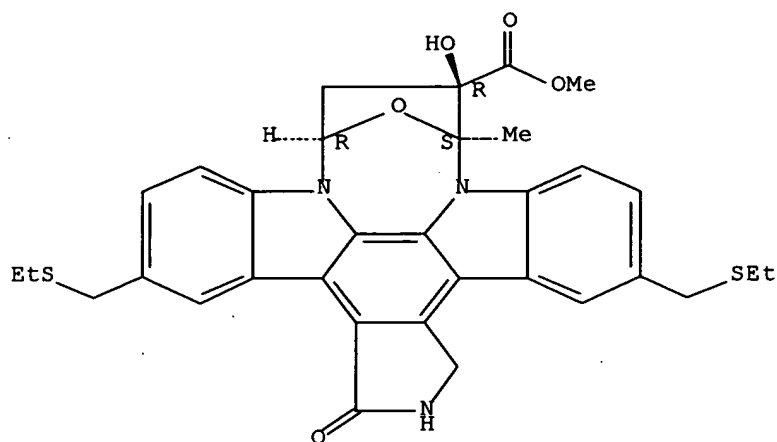
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 2000021531 | A1 | 20000420 | WO 1999-JP5605 | 19991012 |
| | W: | | | | |
| | AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: | | | | |
| | GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | AU 9960075 | A1 | 20000501 | AU 1999-60075 | 19991012 |
| | EP 1121932 | A1 | 20010808 | EP 1999-970320 | 19991012 |
| | R: | | | | |
| | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| | US 6451787 | B1 | 20020917 | US 2001-807293 | 20010611 |
| | US 2003013701 | A1 | 20030116 | US 2002-228645 | 20020826 |
| PRAI | JP 1998-290194 | A | 19981013 | | |
| | WO 1999-JP5605 | W | 19991012 | | |
| | US 2001-807293 | A1 | 20010611 | | |

OS MARPAT 132:260699
 AB Remedies for ocular diseases contain dindolopyrrolobenzodiazocine derivs.
 (Markush structure given) as active ingredients. The effect of a compd. of this invention in a retinal ischemia/reperfusion model was demonstrated.

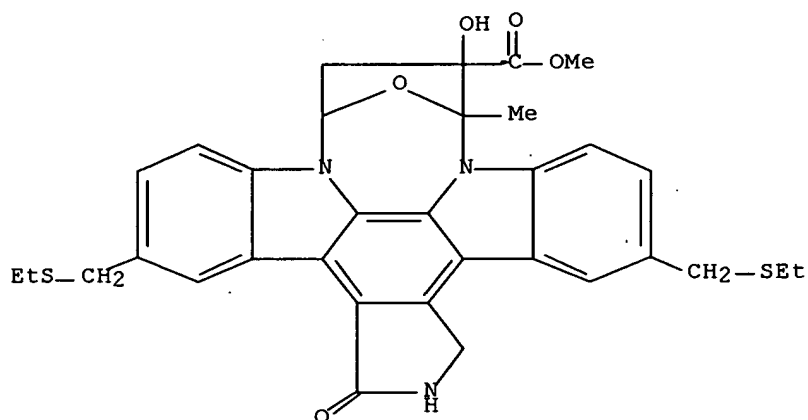
IT 156177-65-0 263554-49-0
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study);
 USES (Uses)
 (remedy for ocular diseases)

RN 156177-65-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 263554-49-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester (9CI)
 (CA INDEX NAME)



RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 21 OF 54 CAPLUS COPYRIGHT 2003 ACS

AN 2000:227509 CAPLUS

DN 132:260705

TI Methods using fused pyrrolocarbazole compounds for preventing/treating damage to sensory hair cells and cochlear neurons

IN Ylikoski, Jukka; Pirvola, Ulla; Saarma, Mart; Walton, Kevin; Hudkins, Robert L.

PA Cephalon, Inc., USA

SO PCT Int. Appl., 232 pp.

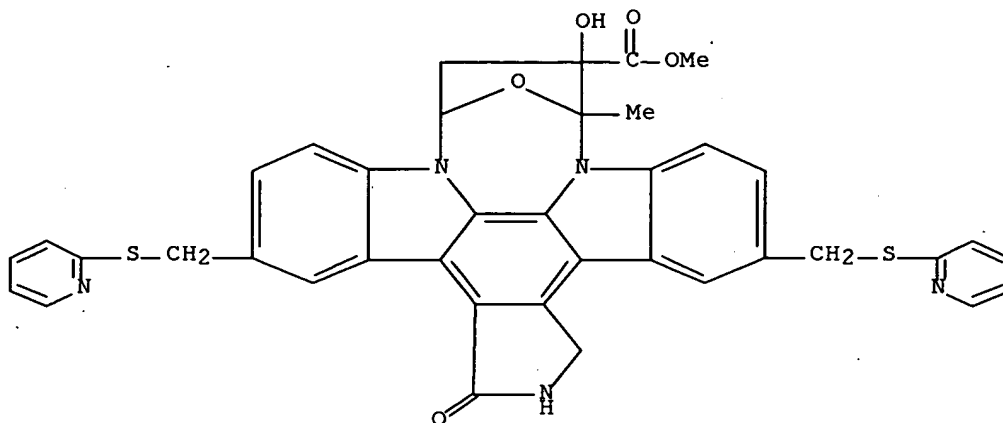
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|--|----------|-----------------|----------|
| PI | WO 2000018407 | A1 | 20000406 | WO 1999-US21780 | 19990924 |
| | W: | AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| | CA 2345295 | AA | 20000406 | CA 1999-2345295 | 19990924 |
| | AU 9960532 | A1 | 20000417 | AU 1999-60532 | 19990924 |
| | EP 1126855 | A1 | 20010829 | EP 1999-969678 | 19990924 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | |
| | JP 2002525329 | T2 | 20020813 | JP 2000-571925 | 19990924 |
| | US 6448283 | B1 | 20020910 | US 1999-404187 | 19990924 |
| | US 2002115706 | A1 | 20020822 | US 2002-41224 | 20020108 |
| PRAI | US 1998-101763P | P | 19980925 | | |
| | US 1999-404187 | A3 | 19990924 | | |
| | WO 1999-US21780 | W | 19990924 | | |
| OS | MARPAT 132:260705 | | | | |
| AB | Methods for preventing or treating damage to sensory hair cells and cochlear neurons are disclosed. The methods comprise the administration of an effective amt. of a fused pyrrolocarbazole compd. (Markush included). The method provides for the prevention/treatment of both hearing loss and loss of the sense of balance. Prepn. of compds. of the invention is described. | | | | |
| IT | 263141-87-3P | | | | |
| | RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (fused pyrrolocarbazoles for preventing or treating damage to sensory hair cells and cochlear neurons) | | | | |
| RN | 263141-87-3 | CAPLUS | | | |
| CN | 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5,16-bis[(2-pyridinylthio)methyl]-, methyl ester (9CI) (CA INDEX NAME) | | | | |



IT 156177-65-0

RL: BAC (Biological activity or effector, except adverse); BSU
(Biological
study, unclassified); THU (Therapeutic use); BIOL (Biological study);

USES

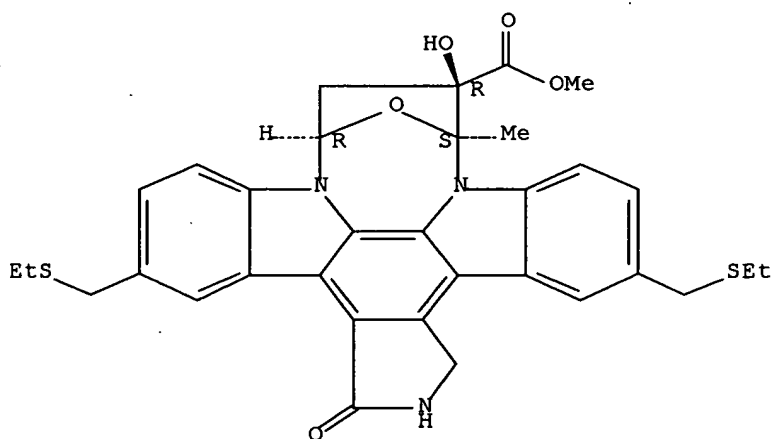
(Uses)

(fused pyrrolocarbazoles for preventing or treating damage to sensory
hair cells and cochlear neurons)

RN 156177-65-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-
2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
(9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 22 OF 54 CAPLUS COPYRIGHT 2003 ACS

AN 2000:161543 CAPLUS

DN 132:217150

TI Methods for identification of compounds modulating multiple lineage kinase

proteins, compound preparation, and therapeutic use

IN Maroney, Anna; Walton, Kevin M.; Dionne, Craig A.; Neff, Nicola; Knight, Ernest, Jr.; Glicksman, Marcie A.

PA Cephalon, Inc., USA

SO PCT Int. Appl., 158 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|--|----------|-----------------|----------|
| PI | WO 2000013015 | A1 | 20000309 | WO 1999-US18864 | 19990818 |
| | W: | AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| | CA 2339539 | AA | 20000309 | CA 1999-2339539 | 19990818 |
| | AU 9956793 | A1 | 20000321 | AU 1999-56793 | 19990818 |
| | EP 1105728 | A1 | 20010613 | EP 1999-943759 | 19990818 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | |
| | BR 9913190 | A | 20011211 | BR 1999-13190 | 19990818 |
| | JP 2002523780 | T2 | 20020730 | JP 2000-567949 | 19990818 |
| | NO 2001000389 | A | 20010402 | NO 2001-389 | 20010123 |
| | BG 105360 | A | 20011031 | BG 2001-105360 | 20010319 |
| PRAI | US 1998-97980P | P | 19980826 | | |
| | WO 1999-US18864 | W | 19990818 | | |

OS MARPAT 132:217150

AB Methods for identifying compds. which modulate activity of a multiple lineage kinase protein and promotes cell survival or cell death comprise contacting the cell contg. the multiple lineage kinase protein with the compd., detg. whether the compd. decreases activity of the multiple lineage kinase protein, and detg. whether the compd. promotes cell survival are provided. Methods for identifying compds. which may be useful in the treatment of neurodegenerative disorders and/or

inflammation

are also provided. Methods for modulating the activity of a multiple lineage kinase protein comprising contacting the protein or a cell

contg.

the protein with an indeno- or indolo- compd. of the invention are also provided. Methods of treating neurodegenerative disorders and/or inflammation are also provided.

IT 156177-65-0 200632-54-8 200633-48-3

200636-14-2 260388-68-9

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological

study, unclassified); THU (Therapeutic use); BIOL (Biological study);

USES

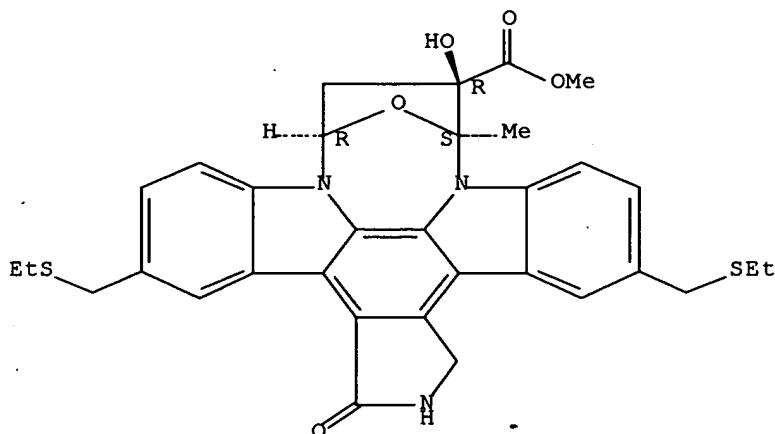
(Uses)

(multiple lineage kinase modulator identification, compd. prepn., and therapeutic use)

RN 156177-65-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

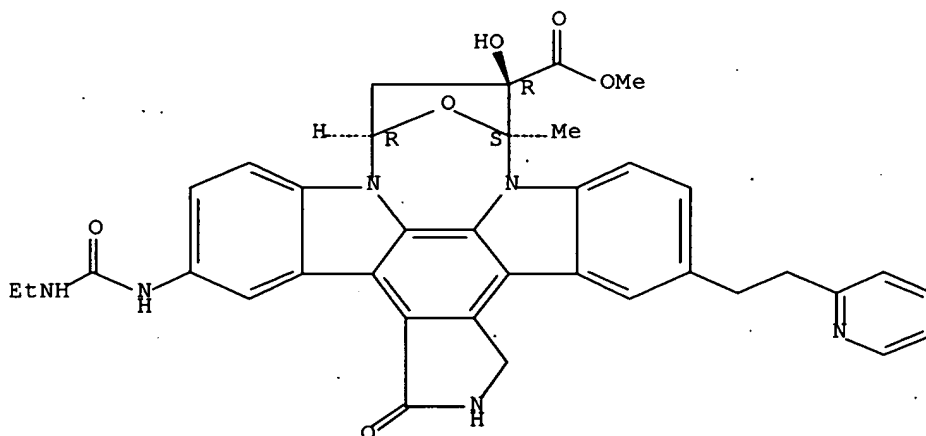
Absolute stereochemistry.



RN 200632-54-8 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 16-[[(ethylamino) carbonyl] amino]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-5-[2-(2-pyridinyl)ethyl]-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

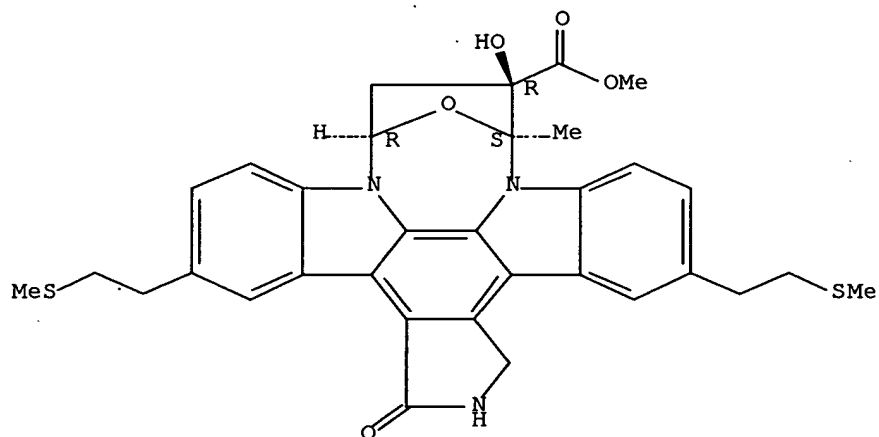


RN 200633-48-3 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-

i)[1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-5,16-bis[2-(methylthio)ethyl]-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

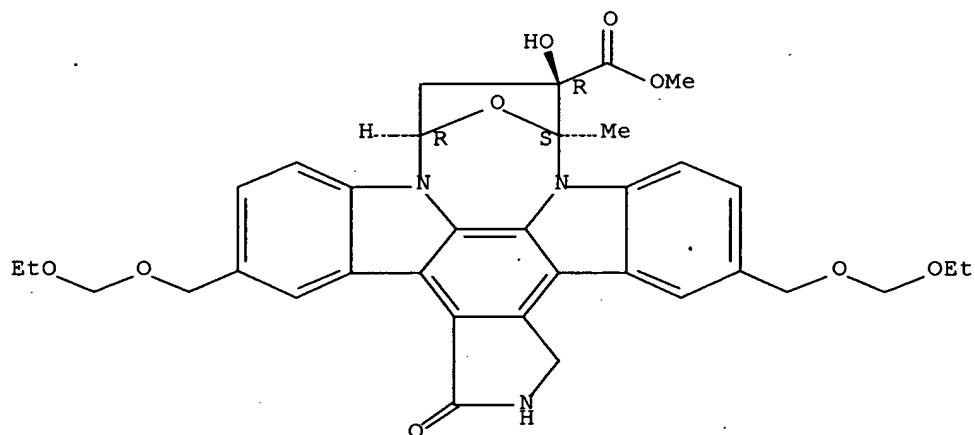


RN 200636-14-2 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-

bis[(ethoxymethoxy)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

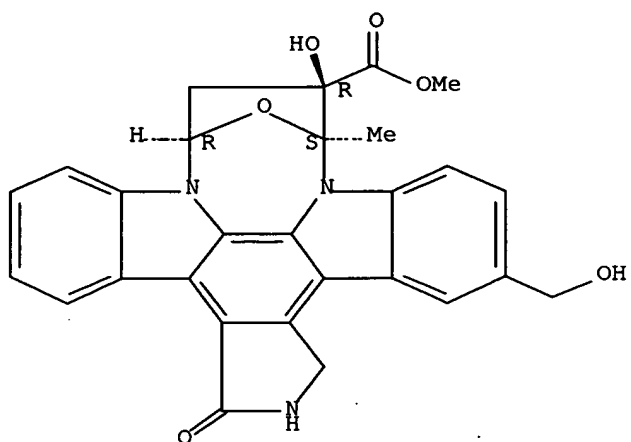


RN 260388-68-9 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 2,3,9,10,11,12-hexahydro-10-

hydroxy-5-(hydroxymethyl)-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 23 OF 54 CAPLUS COPYRIGHT 2003 ACS

AN 2000:125148 CAPLUS

DN 132:263477

TI CEP-1347 inhibits caerulein-induced rat pancreatic JNK activation and ameliorates caerulein pancreatitis

AU Wagner, Andreas C. C.; Mazzucchelli, Luca; Miller, Matthew; Camoratto, Anna Marie; Goke, Burkhard

CS Departments of Gastroenterology, University of Bern, Bern, CH-3010, Switz.

SO American Journal of Physiology (2000), 278(1, Pt. 1), G165-G172

CODEN: AJPHAP; ISSN: 0002-9513

PB American Physiological Society

DT Journal

LA English

AB Pancreatic caerulein-induced activation of c-Jun NH2-terminal kinase (JNK)

has been reported, and JNK has been proposed as a mediator during induction of hyperstimulated pancreatitis. CEP-1347 has recently been described as a specific JNK inhibitor. We tested whether CEP-1347 inhibits caerulein-induced pancreatic JNK activation in isolated acini and in vivo. CEP-1347 dose dependently inhibited acinar caerulein-induced JNK activation with nearly complete inhibition at 2 .mu.M but had no effect on digestive enzyme release. For in vivo studies, rats were pretreated with CEP-1347 before caerulein hyperstimulation. For assessment of JNK activation and histol. alterations, animals were killed 30 min or 2 and

4 h after caerulein hyperstimulation, resp. Pancreatic wet wt., serum enzyme levels, and pancreatic activity of p38 and extracellular signal-regulated kinase (ERK) were also detd. Caerulein hyperstimulation

strongly activated JNK, p38, and ERK. CEP-1347 pretreatment dose dependently reduced caerulein-induced pancreatic JNK activation without p38 or ERK inhibition. JNK inhibition also reduced pancreatic edema formation and reduced histol. severity of pancreatitis. Thus we show that

CEP-1347 inhibits JNK activation in vivo and ameliorates caerulein-induced pancreatitis.

IT 156177-65-0, CEP-1347

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

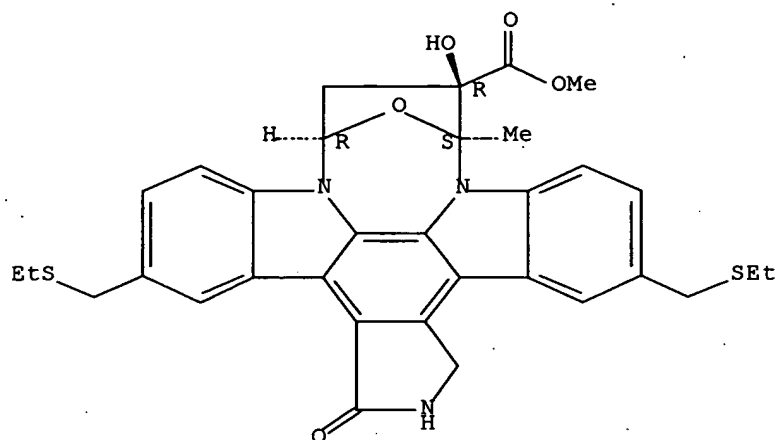
(Uses)

(CEP-1347 inhibits caerulein-induced pancreatic JNK activation and ameliorates caerulein pancreatitis)

RN 156177-65-0 CAPLUS

CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

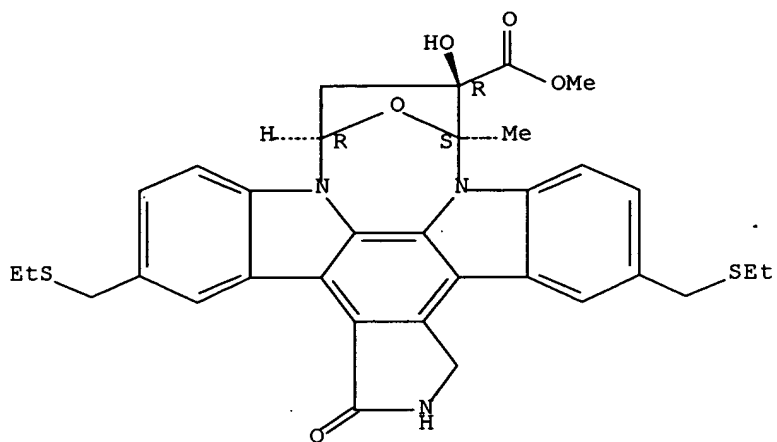
Absolute stereochemistry.



RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 24 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2000:119174 CAPLUS
 DN 132:263567
 TI Rescue of hearing, auditory hair cells, and neurons by CEP-1347/KT7515,
 an inhibitor of c-Jun N-terminal kinase activation
 AU Pirvola, Ulla; Xing-Qun, Liang; Virkkala, Jussi; Saarma, Mart; Murakata,
 Chikara; Camoratto, Anna Marie; Walton, Kevin M.; Ylikoski, Jukka
 CS Institute of Biotechnology and Department of Otorhinolaryngology,
 University of Helsinki, Helsinki, 00014, Finland
 SO Journal of Neuroscience (2000), 20(1), 43-50
 CODEN: JNRSDS; ISSN: 0270-6474
 PB Society for Neuroscience
 DT Journal
 LA English
 AB We have studied the mechanisms of auditory hair cell death after insults
 in vitro and in vivo. We show DNA fragmentation of hair cell nuclei
 after ototoxic drug and intense noise trauma. By using phospho-specific
 c-Jun-N-terminal kinase (JNK) and c-Jun antibodies in immunohistochem.,
 we show that the JNK pathway, assocd. with stress, injury, and apoptosis,
 is activated in hair cells after trauma. CEP-1347, a deriv. of the
 indolocarbazole K252a, is a small mol. that has been shown to attenuate
 neurodegeneration by blocking the activation of JNK. S.c. delivered
 CEP-1347 attenuated noise-induced hearing loss. The protective effect
 was demonstrated by functional tests, which showed less hearing threshold
 shift in CEP-1347-treated than in nontreated guinea pigs, and by
 morphometric methods showing less hair cell death in CEP-1347-treated
 cochleas. In organotypic cochlear cultures, CEP-1347 prevented
 neomycin-induced hair cell death. In addn. to hair cells, CEP-1347
 promoted survival of dissocd. cochlear neurons. These results suggest
 that therapeutic intervention in the JNK signaling cascade, possibly by
 using CEP-1347, may offer opportunities to treat inner ear injuries.
 IT 156177-65-0, CEP-1347
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study);
 USES (Uses)
 (rescue of hearing, auditory hair cells, and neurons by
 CEP-1347/KT7515, inhibitor of c-Jun N-terminal kinase activation,
 after ototoxic drug and intense noise trauma)
 RN 156177-65-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-
 i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-
 2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
 (9S,10R,12R)- (9CI) (CA INDEX NAME)

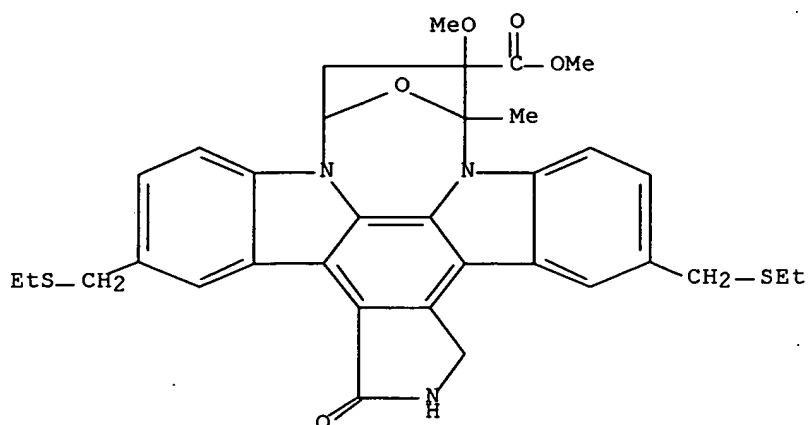
Absolute stereochemistry.



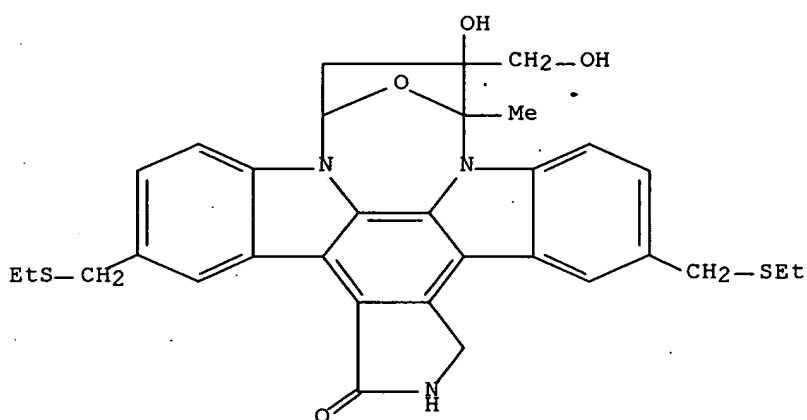
RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 25 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 2000:117036 CAPLUS
 DN 132:171117
 TI Particle-forming compositions containing fused pyrrolocarbazoles
 IN Dickason, David A.; Patel, Piyush R.; Corvari, Vincent; Shek, Efraim;
 Herman, Joseph L.; Skell, Jeffry M.
 PA Cephalon, Inc., USA
 SO PCT Int. Appl., 59 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 2

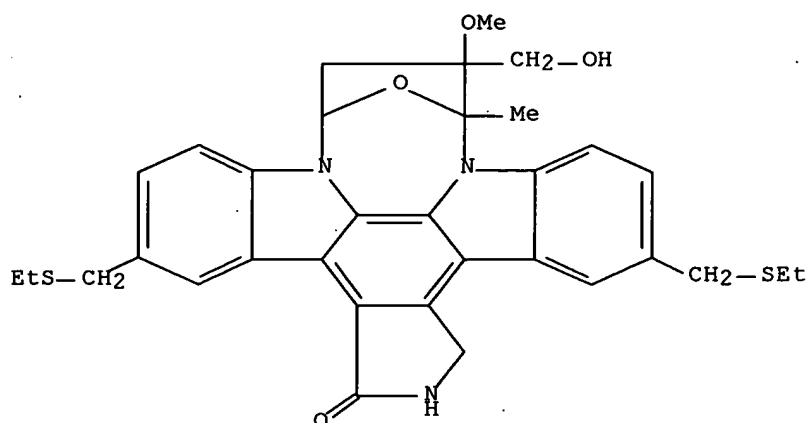
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 2000008004 | A1 | 20000217 | WO 1999-US17795 | 19990806 |
| | W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG CA 2338546 AA 20000217 CA 1999-2338546 19990806 AU 9954674 A1 20000228 AU 1999-54674 19990806 EP 1102758 A1 20010530 EP 1999-940914 19990806 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| PRAI | US 1998-95611P | P | 19980806 | | |
| | US 1999-368409 | A | 19990805 | | |
| | WO 1999-US17795 | W | 19990806 | | |
| OS | MARPAT 132:171117 | | | | |
| AB | A nonaq., particle-forming, fused pyrrolocarbazole-contg. compn. is disclosed. Upon contact with an aq. medium, the particle-forming compn. spontaneously disperses into suspended particles, thereby forming a stable suspension that provides greatly improved bioavailability of orally administered fused pyrrolocarbazole compds. Thus, a formulation contained an indolocarbazole 100 mg/mL, PEG 1450 70 and Polysorbate 80 30%. The bioavailability of the drugs was improved significantly by the particle-forming compn. | | | | |
| IT | 258342-87-9 258342-88-0 258342-89-1 RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (particle-forming compns. contg. fused pyrrolocarbazoles) | | | | |
| RN | 258342-87-9 CAPLUS | | | | |
| CN | 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4- i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]- 2,3,9,10,11,12-hexahydro-10-methoxy-9-methyl-1-oxo-, methyl ester (9CI) (CA INDEX NAME) | | | | |



RN 258342-88-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocin-1-one, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-10-(hydroxymethyl)-9-methyl- (9CI) (CA INDEX NAME)



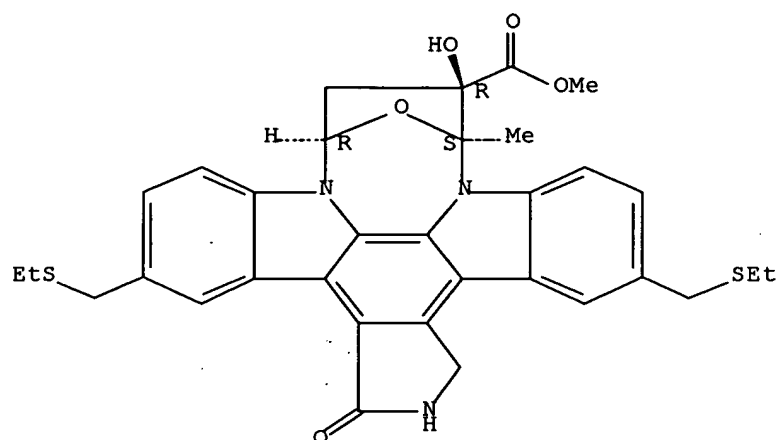
RN 258342-89-1 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocin-1-one, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-(hydroxymethyl)-10-methoxy-9-methyl- (9CI) (CA INDEX NAME)



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 26 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1999:701127 CAPLUS
 DN 132:18728
 TI CEP-1347 (KT7515), an inhibitor of JNK activation, rescues sympathetic neurons and neuronally differentiated PC12 cells from death evoked by three distinct insults
 AU Maroney, Anna C.; Finn, James P.; Bozyczko-Coyne, Donna; O'Kane, Teresa M.; Neff, Nicola T.; Tolkovsky, Aviva M.; Park, David S.; Yan, Chao Yun Irene; Troy, Carol M.; Greene, Lloyd A.
 CS Cephalon, West Chester, PA, 19380, USA
 SO Journal of Neurochemistry (1999), 73(5), 1901-1912
 CODEN: JONRA9; ISSN: 0022-3042
 PB Lippincott Williams & Wilkins
 DT Journal
 LA English
 AB The c-Jun N-terminal kinase signaling cascade appears to play a role in some cases of cell death, including neuronal apoptosis. CEP-1347 (KT7515), an indolocarbazole of the K252a family, blocks this stress signaling cascade and promotes survival. Here, we used CEP-1347 to probe whether neuronal death pathways activated by distinct insults also possess elements in common. Cultured rat sympathetic neurons and neuronally differentiated PC12 cells were induced to die by withdrawal of nerve growth factor, exposure to UV irradiation, or subjection to oxidative stress. In each case, death was prevented by 100-200 nM CEP-1347. Moreover, in each of these death paradigms, c-Jun N-terminal kinase 1 activity in neuronally differentiated PC12 cells was elevated by two- or threefold, and this increase was totally blocked by CEP-1347 at concentrations that promoted survival. In contrast, 200 nM CEP-1347 did not block death due to serum withdrawal from undifferentiated PC12 cells or to activation of Fas in Jurkat T cell cultures, even though in each case c-Jun N-terminal kinase 1 activation occurred and was inhibited by CEP-1347. These observations suggest that some but not all death pathways triggered by different insults can include a common mechanistic component, a likely candidate for which is activation of the c-Jun N-terminal kinase signaling cascade.
 IT 156177-65-0, CEP-1347
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (CEP-1347, as inhibitor of JNK activation, rescues sympathetic neurons and neuronally differentiated PC12 cells from death evoked by different insults)
 RN 156177-65-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

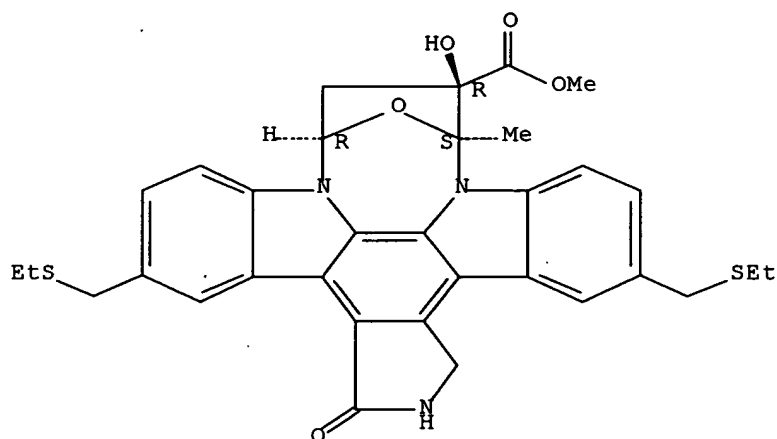


RE.CNT 73 THERE ARE 73 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 27 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1999:99712 CAPLUS
 DN 130:291459
 TI CEP-1347/KT-7515, an inhibitor of c-jun N-terminal kinase activation, attenuates the 1-methyl-4-phenyl tetrahydropyridine-mediated loss of nigrostriatal dopaminergic neurons in vivo
 AU Saporito, Michael S.; Brown, Ellen M.; Miller, Matthew S.; Carswell, Susan
 CS Cephalon Inc., West Chester, PA, USA
 SO Journal of Pharmacology and Experimental Therapeutics (1999), 288(2), 421-427
 CODEN: JPETAB; ISSN: 0022-3565
 PB American Society for Pharmacology and Experimental Therapeutics
 DT Journal
 LA English
 AB We have identified a bis-ethylthiomethyl analog of K-252a, CEP-1347/KT-7515, that promotes neuronal survival in culture and in vivo.
 The neuronal survival properties of CEP-1347/KT-7515 may be related to its ability to inhibit the activation of c-jun N-terminal kinase, a key kinase in some forms of stress-induced neuronal death and perhaps apoptosis. There is evidence that the selective nigrostriatal dopaminergic neurotoxin, MPTP, produces neuronal apoptosis in culture and in adult mice. Thus, our studies were designed to det. if CEP-1347/KT-7515 could protect dopaminergic neurons from MPTP-mediated neurotoxicity. CEP-1347/KT-7515 was assessed for neuroprotective activity in a low dose MPTP model (20 mg/kg) where there was a 50% loss of striatal dopaminergic terminals in the absence of substantia nigra neuronal loss, and a high dose (40 mg/kg) MPTP model where there was a complete loss of dopaminergic terminals and 80% loss of dopaminergic cell bodies. In the low dose MPTP model, CEP-1347/KT-7515 (0.3 mg/kg/day) attenuated the MPTP-mediated loss of striatal dopaminergic terminals by 50%. In the high dose model, CEP-1347/KT-7515 ameliorated the loss of dopaminergic cell bodies by 50% and partially preserved striatal dopaminergic terminals. CEP-1347/KT-7515 did not inhibit monoamine oxidase B or the dopamine transporter, suggesting that the neuroprotective effects of CEP-1347/KT-7515 occur down-stream of the metabolic conversion of MPTP to MPP+ and accumulation of MPP+ into dopaminergic neurons. These data implicate a c-jun N-terminal kinase signaling system in MPTP-mediated dopaminergic degeneration and suggest that CEP-1347/KT-7515 may have potential as a treatment for Parkinson's disease.
 IT 156177-65-0, CEP-1347
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (CEP-1347 attenuates the MPTP-mediated loss of nigrostriatal dopaminergic neurons in vivo)
 RN 156177-65-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-

2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,
(9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 28 OF 54 CAPLUS COPYRIGHT 2003 ACS

AN 1998:435370 CAPLUS

DN 129:156863

TI Chronic sparing of delayed alternation performance and choline acetyltransferase activity by CEP-1347(KT-7515) in rats with lesions of nucleus basalis magnocellularis

AU Dicamillo, A. M.; Neff, N. T.; Carswell, S.; Haun, F. A.

CS Cephalon, Inc., West Chester, PA, 19380, USA

SO Neuroscience (Oxford) (1998), 86(2), 473-483

CODEN: NRSCDN; ISSN: 0306-4522

PB Elsevier Science Ltd.

DT Journal

LA English

AB Peripheral injection of the indolocarbazole CEP-1347(KT-7515) into rats that have sustained ibotenic acid lesions of the nucleus basalis magnocellularis has been shown to prevent the loss of cortically projecting neurons in that basal forebrain region. The present study tested whether this neuroprotective activity would lead to chronic sparing

of a behavior known to be impaired by that lesion, as well as to chronic maintenance of cholinergic activity in cortical target regions of the nucleus basalis. CEP-1347(KT-7515) was injected into adult rats that

had

sustained bilateral ibotenic acid lesions of the nucleus basalis magnocellularis; the 1st injection occurred 18-24 h after lesioning,

with

subsequent injections of CEP-1347(KT-7515) occurring every other day

over

12 days. One day following the last injection the animals were tested

for

retention of a previously learned delayed alternation task. Animals

that

received CEP-1347(KT-7515) committed significantly fewer errors than lesioned animals receiving vehicle. These same animals were tested

again

8-10 wk later (10-12 wk postadministration), without receiving further drug or behavior training during the test-retest interval. The animals that had received CEP-1347(KT-7515) continued to commit fewer errors

than

vehicle-treated animals. Furthermore their performance at this time was indistinguishable from that of normal controls. Anal. of errors showed that CEP-1347(KT-7515) prevented a lesion-induced increase in perseverative errors, suggesting the drug improved attention in the lesioned animals. Choline acetyltransferase activity in the frontal cortex of the behaviorally tested animals that received CEP-1347(KT-

7515)

3 mo previously showed a 40% recovery of the lesion-induced loss seen in the vehicle-treated animals. These results demonstrate that treatment with CEP-1347(KT-7515) over 12 days following excitotoxic damage to the nucleus basalis magnocellularis produces long-term sparing of an attention-demanding behavior.

IT 156177-65-0

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological

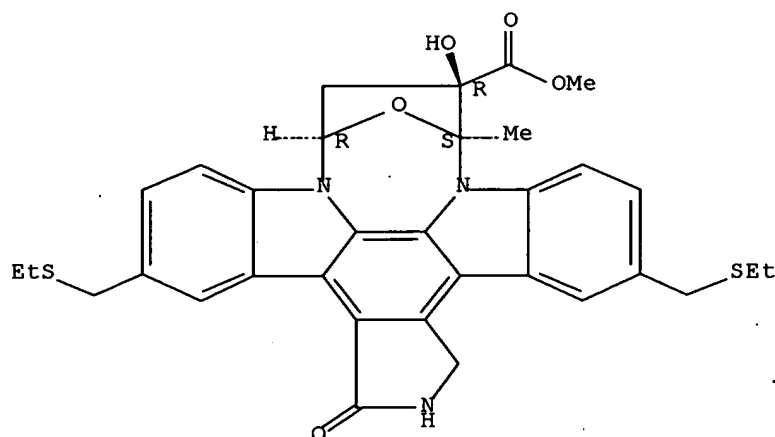
study, unclassified); BIOL (Biological study)

(sparing of delayed alternation performance and frontal cortical

choline acetyltransferase activity by CEP-1347(KT-7515) in rats with

lesions of nucleus basalis magnocellularis)
 RN 156177-65-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

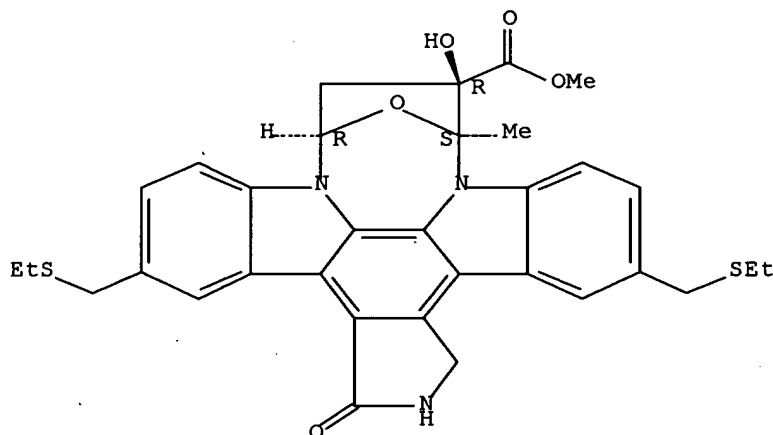


RE.CNT 71 THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 29 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1998:435369 CAPLUS
 DN 129:156862
 TI Preservation of cholinergic activity and prevention of neuron death by
 CEP-1347/KT-7515 following excitotoxic injury of the nucleus basalis
 magnocellularis
 AU Saporito, M. S.; Brown, E. R.; Carswell, S.; Dicamillo, A. M.; Miller,
 M.
 S.; Murakata, C.; Neff, N. T.; Vaught, J. L.; Haun, F. A.
 CS Cephalon Inc., West Chester, PA, 19380, USA
 SO Neuroscience (Oxford) (1998), 86(2), 461-472
 CODEN: NRSCDN; ISSN: 0306-4522
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 AB We have identified a class of small org. mols., derived from the
 indolocarbazole K-252a, that promote the survival of cultured neurons.
 However, many of these indolocarbazoles inhibit protein kinase C and
 neurotrophin-activated tyrosine kinase receptors. These kinase
 inhibitory
 activities may limit the utility of these compds. for neurol. disorders.
 A bis-ethyl-thiomethyl analog of K-252a, CEP-1347/KT-7515, has been
 identified that lacks protein kinase C and tyrosine kinase receptor
 inhibitory activities, yet retains the ability to promote survival of
 cultured neurons, including cholinergic neurons derived from the basal
 forebrain. In the present studies, CEP-1347/KT-7515 was assessed for
 neurotrophic activity on basal forebrain neurons of in vivo rats
 following
 excitotoxic insult. Ibotenate infusion into the nucleus basalis
 magnocellularis reduced levels of choline acetyltransferase activity in
 the cortex, as well as reduced nos. of choline acetyltransferase-
 immunoreactive and retrogradely (FluoroGold)-labeled cortically-
 projecting
 neurons in the nucleus basalis. Systemically administered
 CEP-1347/KT-7515 attenuated the loss of cortical choline
 acetyltransferase
 activity and the loss of the no. of choline acetyltransferase-
 immunoreactive and retrogradely-labeled FluoroGold neurons in the
 nucleus
 basalis. Moreover, CEP-1347/KT-7515 ameliorated the loss of cortical
 choline acetyltransferase if administration was initiated one day, but
 not
 seven days post-lesion. Together, these results demonstrate that
 CEP-1347/KT-7515 protects damaged cortically-projecting basal forebrain
 neurons from degeneration. Thus, CEP-1347/KT-7515 may have therapeutic
 potential in neurodegenerative diseases, such as Alzheimer's disease, in
 which basal forebrain cholinergic neurons degenerate.
 IT 156177-65-0, CEP 1347
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological
 study, unclassified); THU (Therapeutic use); BIOL (Biological study);
 USES
 (Uses)
 (preservation of cholinergic activity and prevention of neuron death
 by
 CEP-1347/KT-7515 following excitotoxic injury of the nucleus basalis
 magnocellularis)

RN 156177-65-0 CAPLUS
CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

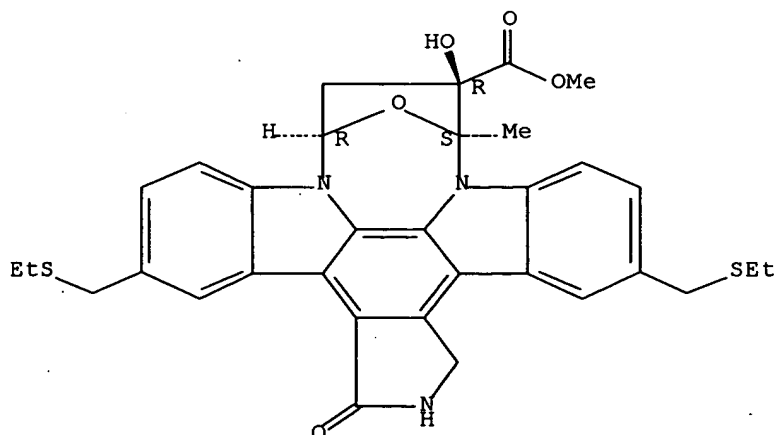
Absolute stereochemistry..



RE.CNT 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 30 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1998:409577 CAPLUS
 DN 129:187409
 TI CEP-1347/KT7515, a JNK pathway inhibitor, supports the in vitro survival of chick embryonic neurons
 AU Borasio, Gian Domenico; Horstmann, Sonja; Anneser, Johanna M. H.; Neff, Nicola T.; Glicksman, Marcie A.
 CS Neurologische Klinik der Ludwig-Maximilians-Universitat Munchen, Klinikum Grosshadern, Munchen, D-81366, Germany
 SO NeuroReport (1998), 9(7), 1435-1439
 CODEN: NERPEZ; ISSN: 0959-4965
 PB Rapid Science Publishers
 DT Journal
 LA English
 AB DEVELOPING neurons depend on target-derived trophic factors for survival in vivo and in vitro, which also decrease the activity of c-Jun N-terminal kinase (JNK). We have recently described a survival-promoting effect of inhibitors of cyclin-dependent kinases and JNK on chick peripheral embryonic neurons. Here, we report that the small trophic mol. CEP-1347/KT7515, which has been shown to inhibit the JNK signaling pathway, can promote long term-survival of cultured chick embryonic dorsal root ganglion, sympathetic, ciliary and motor neurons. Because of their pharmacol. properties, small trophic mols. such as CEP-1347/KT7515 might be of interest for the treatment of neurodegenerative disorders.
 IT 156177-65-0, CEP-1347
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (CEP-1347/KT7515, a JNK pathway inhibitor, supports the in vitro survival of chick embryonic neurons)
 RN 156177-65-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

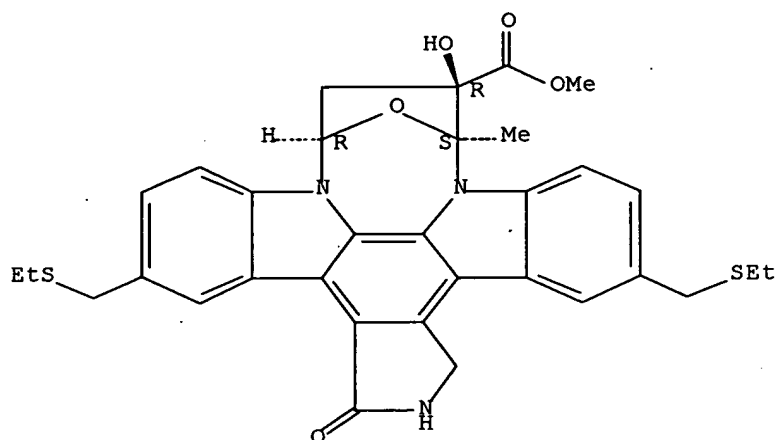
Absolute stereochemistry.



RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 31 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1998:390749 CAPLUS
 DN 129:156808
 TI CEP-1347/KT7515 prevents motor neuronal programmed cell death and injury-induced dedifferentiation in vivo
 AU Glicksman, M. A.; Chiu, A. Y.; Dionne, C. A.; Harty, M.; Kaneko, M.; Murakata, C.; Oppenheim, R. W.; Prevette, D.; Sengelaub, D. R.; Vaught, J. L.; Neff, N. T.
 CS Division of Neuroscience, Beckman Research Institute of the City of Hope Medical Center, Duarte, CA, 91010, USA
 SO Journal of Neurobiology (1998), 35(4), 361-370
 CODEN: JNEUBZ; ISSN: 0022-3034
 PB John Wiley & Sons, Inc.
 DT Journal
 LA English
 AB CEP-1347, also known as KT7515, a deriv. of a natural product indolocarbazole, inhibited motor neuronal death in vitro, inhibited activation of the stress-activated kinase JNK1 (c-jun NH terminal kinase) in cultured spinal motor neurons, but had no effect on the mitogen-activated protein kinase ERK1 in these cells. Results reported here profile the functional activity of CEP-1347/KT7515 in vivo in models of motor neuronal death or differentiation. Application of CEP-1347/KT7515 to the chorioallantoic membrane of embryonic chicks rescued 40% of the lumbar motor neurons that normally die during the developmental period assessed. Peripheral administration of low doses (0.5 and 1 mg/kg daily) of CEP-1347/KT7515 reduced death of motor neurons of the spinal nucleus of the bulbocavernosus in postnatal female rats, with efficacy comparable to testosterone. Strikingly, daily administration of CEP-1347/KT7515 during the 4-day postnatal window of motor neuronal death resulted in persistent long-term motor neuronal survival in adult animals that received no addnl. CEP-1347/KT7515. In a model of adult motor neuronal dedifferentiation following axotomy, local application of CEP-1347/KT7515 to the transected hypoglossal nerve substantially reduced the loss of choline acetyl transferase immunoreactivity obsd. 7 days postaxotomy compared to untreated animals. Results from these expts. demonstrate that a small org. mol. that inhibits a signaling pathway assocd. with stress and injury also reduces neuronal death and degeneration in vivo.
 IT 156177-65-0, KT7515
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study);
 USES (Uses)
 (CEP-1347 (KT7515) prevents motor neuronal programmed cell death and injury-induced dedifferentiation)
 RN 156177-65-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester, (9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 34 OF 54 CAPLUS COPYRIGHT 2003 ACS
 AN 1998:30688 CAPLUS
 DN 128:152250
 TI Motoneuron apoptosis is blocked by CEP-1347 (KT 7515), a novel inhibitor of the JNK signaling pathway
 AU Maroney, Anna C.; Glicksman, Marcie A.; Basma, Alie N.; Walton, Kevin M.; Knight, Ernest, Jr.; Murphy, Carol A.; Bartlett, Becky A.; Finn, James P.; Angeles, Theima; Matsuda, Yuzuru; Neff, Nicola T.; Dionne, Craig A.
 CS Cephalon Incorporated, West Chestor, PA, 19380, USA
 SO Journal of Neuroscience (1998), 18(1), 104-111
 CODEN: JNRSDS; ISSN: 0270-6474
 PB Society for Neuroscience
 DT Journal
 LA English
 AB Neurons undergoing apoptosis can be rescued by trophic factors that simultaneously increase the activity of extracellular signal-regulated kinase (ERK) and decrease c-Jun N-terminal kinase (JNK) and p38. We identified a mol., CEP-1347 (KT7515), that rescues motoneurons undergoing apoptosis and investigated its effect on ERK1 and JNK1 activity. Cultured rat embryonic motoneurons, in the absence of trophic factor, began to die 24-48 h after plating. During the first 24 h ERK1 activity was unchanged, whereas JNK1 activity increased four-fold. CEP-1347 completely rescued motoneurons for at least 72 h with an EC50 of 20 +/- 2 nM. CEP-1347 did not alter ERK1 activity but rapidly inhibited JNK1 activation. The IC50 of CEP-1347 for JNK1 activation was the same as the EC50 for motoneuron survival. Inhibition of JNK1 activation by CEP-1347 was not selective to motoneurons. CEP-1347 also inhibited JNK1 activity in Cos7 cells under conditions of UV irradiation, osmotic shock, and inhibition of glycosylation. Inhibition by CEP-1347 of the JNK1 signaling pathway appeared to be selective, because CEP-1347 did not inhibit p38-regulated mitogen-activated protein kinase-activated protein kinase-2 (MAPKAP2) activity in Cos7 cells subjected to osmotic shock. The direct mol. target of CEP-1347 was not JNK1, because CEP-1347 did not inhibit JNK1 activity in Cos7 cells cotransfected with MEKK1 and JNK1 cDNA constructs. This is the first demonstration of a small org. mol. that promotes motoneuron survival and that simultaneously inhibits the JNK1 signaling cascade.
 IT 156177-65-0, KT 7515
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (motoneuron apoptosis is blocked by CEP-1347 (KT 7515), a novel inhibitor of the JNK signaling pathway)
 RN 156177-65-0 CAPLUS
 CN 9,12-Epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-i][1,6]benzodiazocine-10-carboxylic acid, 5,16-bis[(ethylthio)methyl]-2,3,9,10,11,12-hexahydro-10-hydroxy-9-methyl-1-oxo-, methyl ester,

(9S,10R,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

